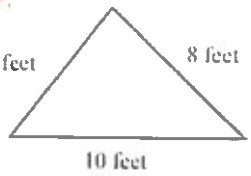
02-04-19
02-09-19
02-15-19
02-17-19
02-19-19
02-23-19

Student: _____ Instructor: Alfredo Alvarez Assignment: MATH5THGRADEWARMUP149e
Date: _____ Course: Math 0410 / 0320 Alvarez

1. Find the perimeter of the figure.

ADD ALL SIDES



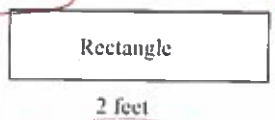
$P = A+B+C$
$P = 5+8+10$
$P = 13+10$
$P = 23$

The perimeter is 23 feet.

Answer: 23

2. Find the perimeter of the figure.

ADD ALL SIDES



$W = 1$
$L = 2$

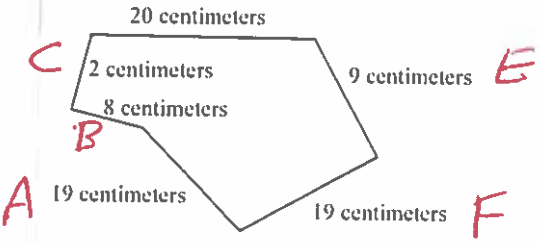
$P = 2L+2W$
$P = 2(2)+2(1)$
$P = 4+2$
$P = 6$

6 ft

Answer: 6

3. Find the perimeter of the figure.

ADD ALL SIDES



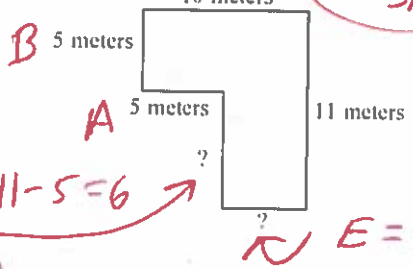
$P = A+B+C+D+E+F$
$P = 19+8+2+20+9+19$
$P = 27+2+20+9+19$
$P = 29+20+9+19$
$P = 49+9+19$
$P = 58+19$
$P = 77$

77 cm

Answer: 77

4. Find the perimeter of the figure.

C
ADD ALL SIDES



$F = 11-5 = 6$
$E = 10-5 = 5$

$P = A+B+C+D+E+F$
$P = 5+5+10+11+5+6$
$P = 10+10+11+5+6$
$P = 20+11+5+6$
$P = 31+5+6$
$P = 36+6$
$P = 42$

The perimeter is 42 m.

Answer: 42

5. A new notebook computer with DVD player costs $1373. Derik Muller has $1444 in his checking account. How much will be left in his checking account after he buys the notebook computer?

Derik will have $ 71 remaining in his checking account after he buys the notebook computer.

1444
−1373
71

Answer: 71

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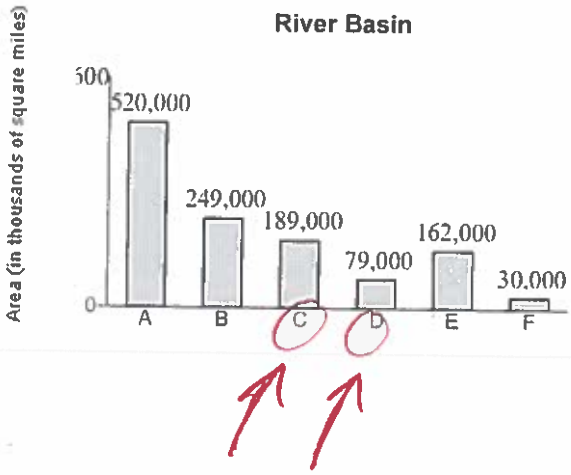
6. Find the total land area drained by the C and D sub-basins.

189000
+ 79000
268000



268000 sq mi

Answer: 268,000

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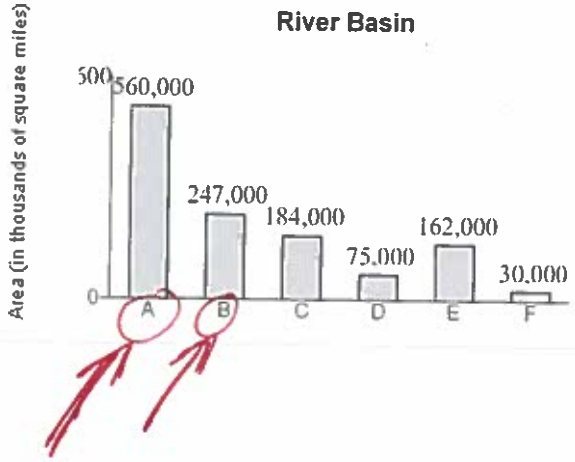
7. How many more square miles of land is drained by the A sub-basin than the B sub-basin?

560000
− 247000
313000



313000 sq mi

Answer: 313,000

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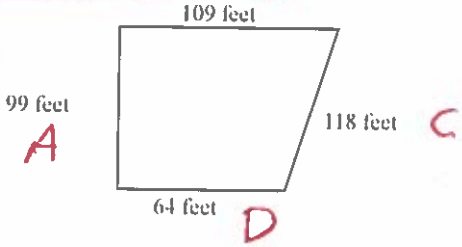
8. ADD ALL SIDES

Alexander is installing a pen for his dog. The pen will have the shape and dimensions of the figure shown to the right. How many feet of fencing are needed to enclose the the area shown?



P = A + B + C + D
P = 99 + 109 + 118 + 64
P = 208 + 118 + 64
P = 326 + 64
P = 390

390 ft

Answer: 390

9. Evelyn Abrams is reading a 971-page book. If she has just finished reading page 967, how many more pages must she read to finish the book?

4 pages

Answer: 4

971
- 967
4

10. A permanent game board is made of granite. It is in the shape of a square with side lengths of 42 ft. Find the perimeter of the square playing board.

The perimeter is 168 feet.

Answer: 168

square → 42, 42, 42, 42

P = 4s'
P = 4(42)
P = 168

s = 42

42
× 4
168

11. The table on the right shows the number of particular stores in ten states. Which state has the most stores?

State (1) B has the most stores.

has the most 123

The Top States for the Stores

State	Number of Stores
A	34
B	123
C	71
D	43
E	75
F	62
G	51
H	79
K	49
L	108

(1) ○ A ○ E ○ K
● B ○ F ○ L
○ C ○ G
○ D ○ H

Answer: (1) B

12. The table on the right shows the number of a particular store in ten states. What is the total number of stores located in the three states with the most stores?

A total of 357 stores are located in the three states with the most stores.

100
161
+ 96
357

State	Number of Stores
Arizona	84
California	100
Florida	64
Georgia	161
Illinois	66
New York	67
Michigan	21
Minnesota	90
Ohio	96
Texas	89

Answer: 357

13. Round 9,778 to the nearest hundred.

The number 9,778 rounded to the nearest hundred is 9800.

Answer: 9,800

9,778 = 9800 = since 7 ≥ 5 Round up

14. Round 698 to the nearest ten.

698 rounded to the nearest ten is 700.

Answer: 700

698 = 700 = since 8 ≥ 5 Round up

15. Round 92,388 to the nearest thousand.

92,388 rounded to the nearest thousand is 92000

Answer: 92,000

92388 = 92000 = since 3 < 5 do not round up

16. Use the distributive property to rewrite each expression.

6(2 + 9)

6(2 + 9) = 6•2 + 6•9

(Type an expression. Do not simplify.)

Answer: 6 • 2 + 6 • 9

6(2+9) = 6•2 + 6•9 =

17. Find the area and the perimeter of the rectangle shown to the right.

L = 9

W = 7

The area of the rectangle is 63 (1) square meters

The perimeter of the rectangle is 32 (2) meters

A = Lw

A = (9)(7)

A = 63

(1) ○ meters. ○ cubic meters. ✗ square meters.

(2) ○ cubic meters. ✗ meters. ○ square meters.

P = 2L + 2W

P = 2(9) + 2(7)

P = 18 + 14

P = 32

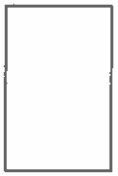
Answers 63

(1) square meters.

32

(2) meters.

18. Find the area and the perimeter of the rectangle shown to the right.



W=18 L=50

The area of the rectangle is 900 (1) square feet

The perimeter of the rectangle is 136 (2) feet

A=LW
A=(50)(18)
A=900

P=2L+2W
P=2(50)+2(18)
P=100+36
P=136

(1)	☒ square feet.	(2)	○ cubic feet.
	○ cubic feet.		○ square feet.
	○ feet.		☒ feet.

Answers 900

(1) square feet.

136

(2) feet.

19. One triple fudge brownie contains 123 calories. How many calories are in 3 triple fudge brownies?

369 calories

1/123 = 3/N cross
1(N) = 123(3) mult
N = 369

123 × 3 = 369

Answer: 369

20. The textbook for a course in biology costs $93. There are 35 students in the class. Find the total cost of the biology books for the class.

The total cost is $ 3255.

1/93 = 35/N
1(N) = 93(35) Cross Mult
N = 3255

93 × 35 = 465 + 2790 = 3255

Answer: 3,255

21. Cabot Creamery is packing a palette of 20-lb boxes of cheddar cheese to send to a local restaurant. There are three layers of boxes on the pallet, and each layer is five boxes wide by three boxes deep.
a. How many boxes are in one layer?
b. How many boxes are on the pallet?
c. What is the weight of the cheese on the pallet?

a. There are [15] boxes in one layer.

b. There are [45] boxes on the pallet.

c. The weight of the cheese on the pallet is [900] lb

Layer = (5)(3) boxes
Layer = 15 boxes in one layer
Pallet = (15)(3)
Pallet = 45 boxes on pallet
Weight of cheese = (45)(20)
= 900 pounds

45 × 20 = 900

Answers 15
45
900

22. A plot of land measures 60 feet by 180 feet. Find its area.

The area of the rectangle is [10800] (1) [square feet]

W = 60 L = 180
A = LW
A = (180)(60)
A = 180 • 60
A = 10800

180 × 60 = 10800

(1) ○ feet.
○ cubic feet.
✕ square feet.

Answers 10,800
(1) square feet.

23. The largest hotel lobby in the world can be found at the Mega Grand Hotel. It is in the shape of a rectangle that measures 224 feet wide by 315 feet in length. Find its area.

L = 315 W = 224

The area of the lobby is [70560] (1) [square feet]

A = LW
A = (315)(224)
A = 70560

315 × 224 = 70560

(1) ○ feet.
○ cubic feet.
✕ square feet.

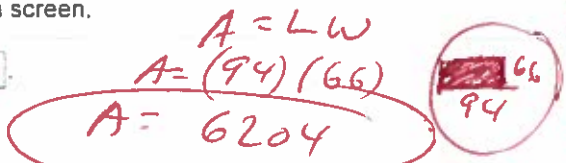
Answers 70,560
(1) square feet.

24. A pixel is a rectangular dot on a graphing calculator screen. If a graphing calculator screen contains 66 pixels in a row and 94 pixels in a column, find the total number of pixels on a screen.

The total number of pixels on a screen is 6204.

Answer: 6,204

$A = LW$
$A = (94)(66)$
$A = 6204$



$L = 94$
$W = 66$

$$\begin{array}{r} {}^{2}94 \\ \times\ 66 \\ \hline 1564 \\ 564 \\ \hline 6204 \end{array}$$

25. A line of print on a computer contains 90 characters. Find how many characters there are in 18 lines.

1620 characters

Answer: 1620

$$\begin{array}{r} {}^{1}18 \\ \times\ 90 \\ \hline 00 \\ 162 \\ \hline 1620 \end{array}$$

26. One ounce of nuts contains 161 calories. How many calories are in 15 ounces of nuts?

2415 calories

Answer: 2415

$$\frac{1}{161} = \frac{15}{N}$$

Cross Mult

$1(N) = 161(15)$

$N = 2415$

$$\begin{array}{r} {}^{3}161 \\ \times\ 15 \\ \hline 1805 \\ 161 \\ \hline 2415 \end{array}$$

27. The Thespian club at a local community college is ordering T-shirts. T-shirts size S, M, or L cost $12 each and T-shirts size XL or XXL cost $13 each. Use the table on the right to find the total cost. (The first row is filled in for you.)

T-Shirt Size	Number of Shirts Ordered	Cost per Shirt	Cost per Size Ordered
S	10	$12	$120
M	3		
L	4		
XL	2		
XXL	3		

Total Cost ____

T-Shirt Size	Number of Shirts Ordered	Cost per Shirt	Cost per Size Ordered
S	10	$12	$120
M	3	$ 12	$ 36
L	4	$ 12	$ 48
XL	2	$ 13	$ 26
XXL	3	$ 13	$ 39

Total Cost$ 269

12
120
36
48
26
+ 39
269

Answers 12
36
12
48
13
26
13
39
269

28. A plant for a tea company has bagging machines capable of bagging 1000 bags of tea per minute. If the plant runs 22 hours a day, how many tea bags are produced in one day?

The company produces 1,320,000 tea bags in one day of operation.

Answer: 1,320,000

convert to minutes
60
22
120
120
1320

(1000)(22 hrs) =
(1000)(22 * 60 hour minutes) =
(1000)(1320) =
1,320,000 =

29. Find the quotient.

$\frac{45}{5}$

Select the correct choice below and fill in any answer boxes in your choice.

A. $\frac{45}{5}$ = 9

B. The answer is undefined.

Answer: A. $\frac{45}{5}$ = 9

long division

9
5 | 45
−(45)
0 rem

---

30. Divide the following and then check by multiplying.

$2\overline{)84}$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

A. The quotient does not have a remainder. The quotient is 42.

B. The quotient has a remainder not equal to 0. The quotient is _____ R _____.

C. The quotient is undefined.

Answer: A. The quotient does not have a remainder. The quotient is 42.

long division

42
2 | 84
−(8)
4
−(4)
0
rem

---

31. Divide the following and then check by multiplying.

$5\overline{)260}$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

A. The quotient does not have a remainder. The quotient is 52.

B. The quotient has a remainder not equal to 0. The quotient is _____ R _____.

C. The quotient is undefined.

Answer: A. The quotient does not have a remainder. The quotient is 52.

long division

52
5 | 260
−(25)
10
−(10)
0
rem

32. Divide the following and then check by multiplying.

$8\overline{)1969}$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

- A. The quotient does not have a remainder. The quotient is ____.
- B. The quotient has a remainder not equal to 0. The quotient is ____ R ____.
- C. The quotient is undefined.

Answer: B. The quotient has a remainder not equal to 0. The quotient is 246 R 1.

---

33. A truck hauls wheat to a storage granary. It carries a total of 5,500 bushels of wheat in 11 trips. How much does the truck haul each trip if each trip it hauls the same amount?

The truck hauls ____ bushels each trip.

Answer: 500

---

34. There is a bridge over a highway every two miles. The first bridge is at the beginning of a 135-mile stretch of highway. Find how many bridges there are over 135 miles of highway.

____ bridges

Answer: 68

---

35. Suppose the elevation of a peak on a certain planet is 10,560 feet. A mile is 5280 feet. How many miles tall is the peak?

The peak is ____ miles tall.

Answer: 2

---

36. Find the average value of the following list of numbers.

20, 25, 11, 26, 17, 15

The average value is ____.

Answer: 19

37. Find the value of the expression.

12^2

$12^2 =$ 144

Answer: 144

$12^2 =$
$12 \cdot 12 =$
144 =

12
x12
24
12
144

38. Evaluate.

3^4

$3^4 =$ 81

Answer: 81

$3^4 =$
$3 \cdot 3 \cdot 3 \cdot 3 =$
$9 \cdot 3 \cdot 3 =$
$27 \cdot 3 =$
81 =

39. Simplify.

$36 + 6 \cdot 6$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

A. $36 + 6 \cdot 6 =$ 72

B. The expression is undefined.

Answer: A. $36 + 6 \cdot 6 =$ 72

PEMDAS
$36+6 \cdot 6 =$
$36+36 =$
72 =

40. Simplify.

$40 \div 8 \cdot 5 + 9$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

A. $40 \div 8 \cdot 5 + 9 =$ 34

B. The expression is undefined.

Answer: A. $40 \div 8 \cdot 5 + 9 =$ 34

PEMDAS
$40 \div 8 \cdot 5 + 9 =$
$5 \cdot 5 + 9 =$
$25 + 9 =$
34 =

41. Simplify.

$15 \div 3 - 1$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

A. $15 \div 3 - 1 =$ 4

B. The expression is undefined.

Answer: A. $15 \div 3 - 1 =$ 4

PEMDAS
$15 \div 3 - 1 =$
$5 - 1 =$
4 =

42. Simplify.

$18 + \frac{45}{5}$

PEMDAS

$18 + \frac{45}{5} =$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

$18 + 9 =$

27

$27 =$

A. $18 + \frac{45}{5} =$ 27

B. The expression is undefined.

Answer: A. $18 + \frac{45}{5} =$ 27

---

43. Simplify.

$6 \cdot 2 + 6 \cdot 3$

PEMDAS

$6 \cdot 2 + 6 \cdot 3 =$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

$12 + 6 \cdot 3 =$

$12 + 18 =$

30

$30 =$

A. $6 \cdot 2 + 6 \cdot 3 =$ 30

B. The expression is undefined.

Answer: A. $6 \cdot 2 + 6 \cdot 3 =$ 30

---

44. Simplify.

$(2 + 7) \cdot (9 - 6)$

PEMDAS

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

$(2+7) \cdot (9-6) =$

$9 \cdot 3 =$

27

$27 =$

A. $(2 + 7) \cdot (9 - 6) =$ 27

B. The expression is undefined.

Answer: A. $(2 + 7) \cdot (9 - 6) =$ 27

---

45. Simplify.

$3^4 - [26 - (10 - 7)]$

PEMDAS

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

$3^4 - [26 - (10-7)] =$

$3^4 - [26 - (3)] =$

$3^4 - [26 - 3] =$

$3^4 - [23] =$

$3 \cdot 3 \cdot 3 \cdot 3 - 23 =$

$81 - 23 =$

58

$58 =$

A. $3^4 - [26 - (10 - 7)] =$ 58

B. The expression is undefined.

Answer: A. $3^4 - [26 - (10 - 7)] =$ 58

---

46. Evaluate the expression for z = 7.

3 + 4z

3 + 4z = 31

Answer: 31

PEMDAS

3 + 4z =
3 + 4(7) =
3 + 28 =
31 =

---

47. Evaluate the expression for x = 2 and z = 3.

3xz − 4x

3xz − 4x = 10

Answer: 10

PEMDAS

3xz − 4x =
3(2)(3) − 4(2) =
3(6) − 4(2) =
18 − 8 =
10 =

---

48. Evaluate the expression for x = 2, y = 2, and z = 4.

z − x + y

The answer is 4.

Answer: 4

PEMDAS

z − x + y =
(4) − (2) + (2) =
4 − 2 + 2 =
2 + 2 =
4 =

---

49. Evaluate the expression for x = 2 and z = 4.

3x − z

3x − z = 2

Answer: 2

PEMDAS

3x − z =
3(2) − (4) =
6 − 4 =
2 =

---

50. Evaluate the algebraic expression for the given value.

$x^2 - 2x + 7$, for x = 4

When x = 4, $x^2 - 2x + 7$ = 15.
(Simplify your answer.)

Answer: 15

PEMDAS

$x^2 - 2x + 7$ =
$(4)^2 - 2(4) + 7$ =
(4)(4) − 2(4) + 7 =
16 − 8 + 7 =
8 + 7 =
15 =

---

51. Simplify.

3 + 4 • 5 − 11

3 + 4 • 5 − 11 = 12

Answer: 12

PEMDAS

3 + 4 • 5 − 11 =
3 + 20 − 11 =
23 − 11 =
12 =

52. Solve. Check your solution.

$x + 7 = 10$

The solution is x = 3.

Answer: 3

$x+7=10$

$x+7-7=10-7$

$x=3$

Check

$x+7=10$?

$(3)+7=10$?

$3+7=10$?

$10=10$ Good

---

53. Solve. Check your solution.

$23 = y - 9$

The solution is y = 32.

Answer: 32

$23=y-9$

$23+9=y-9+9$

$32=y$

Check

$23=y-9$?

$23=(32)-9$?

$23=32-9$?

$23=23$ Good

---

54. Solve.

$4x = 48$

The solution is x = 12.

Answer: 12

$4x=48$

$\frac{4x}{4}=\frac{48}{4}$

$x=12$

Check

$4x=48$?

$4(12)=48$?

$48=48$

Good

12 × 4 = 48

---

55. Solve the equation. First combine any like terms on each side of the equation.

$x - 4 = -1 + 3$

The solution is x = 6.

Answer: 6

$x-4=-1+3$

$x-4=2$

$x-4+4=2+4$

$x=6$

Check

$x-4=-1+3$?

$(6)-4=-1+3$?

$6-4=-1+3$?

$2=2$

Good

---

56. Solve the following equation.

$5x - 5 = 0$

x = 1

Answer: 1

$5x-5=0$

$5x-5+5=0+5$

$5x=5$

$\frac{5x}{5}=\frac{5}{5}$

$x=1$

Check

$5x-5=0$?

$5(1)-5=0$?

$5-5=0$?

$0=0$

Good

---

57. Solve the equation.

$5n + 50 = 55$

n = 1

Answer: 1

$5n+50=55$

$5n+50-50=55-50$

$5n=5$

$\frac{5n}{5}=\frac{5}{5}$

$n=1$

Check

$5n+50=55$?

$5(1)+50=55$?

$5+50=55$

$55=55$

Good

58. Find the prime factorization of the following number.

44

The prime factorization of 44 is $2 \cdot 2 \cdot 11$.

Answer: $2^2 \cdot 11$

Primes 2, 3, 5, 7, 11, 13, 17...

2 | 44
2 | 22
11 | 11
1

$44 = 2 \cdot 2 \cdot 11$ OR $2^2 \cdot 11$

59. Find the prime factorization of the following number.

4

The prime factorization of 4 is $2 \cdot 2$.

Answer: 2^2

Primes 2, 3, 5, 7, 11, 13, 17.....

2 | 4
2 | 2
1

$4 = 2 \cdot 2$ OR 2^2

60. Write the prime factorization of 592.

The prime factorization of 592 is (1) ____

(1) ○ $2^5 \cdot 37$. ○ $2 \cdot 3 \cdot 5 \cdot 7$.
○ $2^4 \cdot 37$.
○ $2 \cdot 37$.
○ $2^3 \cdot 37$.

Answer: (1) $2^4 \cdot 37$.

Primes 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, ...

2 | 592
2 | 296
2 | 148
2 | 74
37 | 37
1

$592 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 37$ OR $2^4 \cdot 37$

61. Find the prime factorization of the following number.

190

The prime factorization of 190 is $2 \cdot 5 \cdot 19$.

Answer: $5 \cdot 2 \cdot 19$

Primes 2, 3, 5, 7, 11, 13, 17, 19, ...

2 | 190
5 | 95
19 | 19
1

$190 = 2 \cdot 5 \cdot 19$

62. Divide $-\frac{15}{16} \div 30$. Write the quotient in simplest form.

$-\frac{15}{16} \div 30 =$ $-\frac{1}{32}$ (Type an integer or a fraction.)

Answer: $-\frac{1}{32}$

$-\frac{15}{16} \div 30 =$

$-\frac{15}{16} \cdot \frac{1}{30} =$ rewrite

$\frac{(-1)(3)(5)}{(2)(2)(2)(2)} \cdot \frac{1}{(2)(3)(5)} =$

$\frac{(-1)(3)(5)}{(2)(2)(2)(2)} \cdot \frac{1}{(2)(3)(5)} =$

$\frac{(-1)(1)}{(2)(2)(2)(2)(2)} = \frac{-1}{32}$

Primes 2, 3, 5, 7, 11, ...

3 | 15
5 | 5
1

2 | 16
2 | 8
2 | 4
2 | 2
1

2 | 30
3 | 15
5 | 5
1

$15 = 3 \cdot 5$
$16 = 2 \cdot 2 \cdot 2 \cdot 2$
$30 = 2 \cdot 3 \cdot 5$

63. Perform the indicated operation.

$4 \div \frac{9}{10}$

$4 \div \frac{9}{10} =$ $\frac{40}{9}$ (Simplify your answer.)

Answer: $\frac{40}{9}$

$4 \div \frac{9}{10} =$

$\frac{4}{1} \div \frac{9}{10} =$

$\frac{4}{1} \cdot \frac{10}{9} =$ rewrite

$\frac{40}{9} =$

64. Perform the indicated operation.

$\frac{5}{7} \div \frac{11}{14}$

$\frac{5}{7} \div \frac{11}{14} =$ $\frac{10}{11}$ (Type an integer or a simplified fraction.)

Answer: $\frac{10}{11}$

$\frac{5}{7} \div \frac{11}{14} =$

$\frac{5}{7} \cdot \frac{14}{11} =$ rewrite

$\frac{5}{7} \cdot \frac{(2)(7)}{11} =$

$\frac{5}{1} \cdot \frac{(2)}{11} = \frac{10}{11}$

Primes 2, 3, 5, 7, 11, 13

2 | 14

7 | 7

1

$14 = 2 \cdot 7$

65. Find $\frac{1}{5}$ of 180.

$\frac{1}{5}$ of 180 is 36. (Simplify your answer. Type a whole number, fraction, or mixed number.)

Answer: 36

$\frac{1}{5} \cdot 180 =$

$\frac{1}{(5)} \cdot \frac{(2)(2)(3)(3)(5)}{1} =$

$\frac{1}{(5)} \cdot \frac{(2)(2)(3)(3)(5)}{1} =$

$(1)(2)(2)(3)(3) = 36$

Primes 2, 3, 5, 7, 11, 13

2 | 180

2 | 90

3 | 45

3 | 15

5 | 5

1

66. Find $\frac{3}{4}$ of 24. Write the answer in simplest form.

$\frac{3}{4}$ of 24 is 18. (Simplify your answer.)

Answer: 18

$\frac{3}{4} \cdot 24 =$

$\frac{3}{(2)(2)} \cdot \frac{(2)(2)(2)(3)}{1} =$

$\frac{3}{(2)(2)} \cdot \frac{(2)(2)(2)(3)}{1} = (3)(2)(3) = 18$

Primes 2, 3, 5, 7, 11, 13

2 | 4

2 | 2

1

2 | 24

2 | 12

2 | 6

3 | 3

1

67. Insert $<$, $>$, or $=$ between the pair of numbers to form a true statement.

0.62 0.69

0.62 $<$ 0.69

Answer: $<$

$0.62 < 0.69$

68. Insert <, >, or = between the pair of numbers to form a true statement.

1.497 1.5

1.497 < 1.5

Answer: <

1.497 1.5
1.497 < 1.500

---

69. Write <, >, or = between the pair of numbers to form a true statement.

0.427 0.42700

0.427 = 0.42700

Answer: =

0.427 0.42700
HW 0.42700 = 0.42700

---

70. Round the decimal to the nearest tenth.

0.33

0.33 rounded to the nearest tenth is 0.3.

Answer: 0.3

0.33
less than 5 do not round up
0.3 round

---

71. Round the decimal to the nearest ten.

13,760.021

13,760.021 rounded to the nearest tens place is 13760.

Answer: 13,760

13760.021
less than 5 do not round up
13760 round

---

72. Round 0.4226 to the nearest thousandth.

0.4226 ≈ 0.423

Answer: 0.423

0.4226
yes more than 5
0.423

---

73. Round 4.72661419 to the nearest tenth.

4.72661419 rounded to the nearest tenth is 4.7.

Answer: 4.7

4.72661419
less than 5 do not round up
4.7

74. Round the monetary amount to the nearest dollar.

$24.77

$24.77 rounded to the nearest dollar is $ 25.

Answer: 25

24.77 = 25 — more than 5 round up

---

75. Round $0.8736 to the nearest cent.

$0.8736 rounded to the nearest cent is $ 0.87.

Answer: 0.87

0.8736 = 0.87 — less than 5 do not round up

---

76. A used biology textbook is priced at $34.81. Round this price to the nearest dollar.

$34.81 rounded to the nearest dollar is $ 35.

Answer: 35

34.81 = 35 — more than 5 round up

---

77. Write as a decimal.

$4\frac{19}{100}$

$4\frac{19}{100}$ = 4.19

Answer: 4.19

$4\frac{19}{100} = 4 + \frac{19}{100} = 4 + .19 = 4.19$

long division: 19 ÷ 100 = .19; 19.00 − 100 = 900; 900 − 900 = 0 rem

---

78. Add the following.

6.5 + 6.24

6.5 + 6.24 = 12.74 (Type an integer or a decimal.)

Answer: 12.74

6.50 + 6.24 = 12.74

---

79. Subtract and check.

9.7 − 2.5

9.7 − 2.5 = 7.2

Answer: 7.2

9.7 − 2.5 = 7.2

---

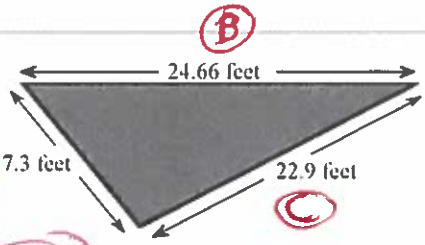
80. Subtract and check the following.

15 − 1.1

15 − 1.1 = 13.9 (Type an integer or a decimal.)

Answer: 13.9

81. A landscape architect is planning a border for a flower garden shaped like a triangle. The sides of the garden measure 17.3 feet, 24.66 feet, and 22.9 feet. Find the amount of border material needed.



The amount of border material needed is 64.86 feet.
(Type an integer or a decimal.)

Answer: 64.86

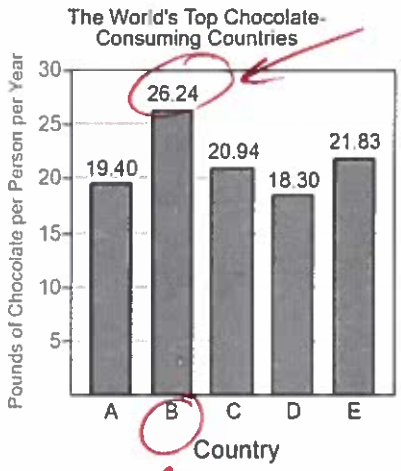
82. The bar graph shows the top five chocolate-consuming nations in the world. Use this graph to answer the following.

Which country has the greatest chocolate consumption per person?

Choose the correct answer below.

- ○ Country C
- ○ Country D
- ⊗ Country B
- ○ Country A
- ○ Country E

Answer: Country B



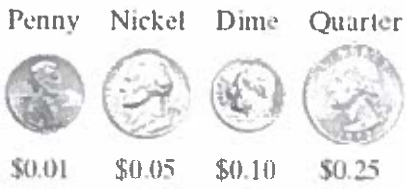
83. Use the values of the coins given below. Write the value of the group of coins shown to the right. To do so, it is usually easiest to start with the coin(s) of greatest value and end with the coin(s) of least value.

Penny	Nickel	Dime	Quarter
$0.01	$0.05	$0.10	$0.25

The total value of the group is $ 1.30.

Answer: 1.30

84. Use the values of the coins given to the right. Name the different ways that coins can have a value of $0.15 given that you may use no more than 10 coins.



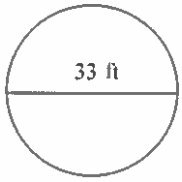
Choose the correct answer below. Select all that apply.

- [ ] A. 3 nickels and 6 pennies
- [x] B. 1 dime and 5 pennies
- [x] C. 3 nickels
- [x] D. 2 nickels and 5 pennies
- [ ] E. 1 dime, 3 nickels and 5 pennies
- [x] F. 1 dime and 1 nickel

Answer: B. 1 dime and 5 pennies, C. 3 nickels, D. 2 nickels and 5 pennies, F. 1 dime and 1 nickel

---

85. Find the circumference of the circle in terms of π. Then use the approximation 3.14 for π and approximate the circumference.



a. Find the circumference of the circle in terms of π.

The exact circumference is 33π ft.

b. Find the circumference of the circle using 3.14 as an approximation for π.

The approximate circumference is 103.62 ft. (Round to the nearest hundredth as needed.)

Answers 33π

103.62

---

86. Find the circumference of the circle in terms of π. Then use the approximation 3.14 for π and approximate the circumference.

a. Find the circumference of the circle in terms of π.

The exact circumference is 9.4π yd.

b. Find the circumference of the circle using 3.14 as an approximation for π.

The approximate circumference is 29.516 yd. (Round to the nearest thousandth as needed.)

Answers 9.4π

29.516

---

87. A 1-ounce serving of cream cheese contains 5.7 grams of saturated fat. How much saturated fat is in 7 ounces of cream cheese?

39.9 g

Answer: 39.9

---

88. The screen of a portable digital device is a rectangle that measures 4.5 inches by 3.6 inches. Find the area of the screen.

The area is 16.20 square inches. (Type an integer or a decimal.)

Answer: 16.2

---

89. The diameter of a ferris wheel is 150 feet. Find its circumference. Give an exact answer and an approximation using 3.14 for π.

The circumference is 150π feet.
(Type an exact answer in terms of π.)

The circumference is approximately 471.00 feet.
(Type an integer or a decimal. Round to the nearest hundredth as needed.)

Answers 150π

471.00

90. A meter is a unit of length approximately equal to 39.37 inches. If someone is 1.87 meters tall, what is his or her approximate height in inches?

Using the given conversion, someone who is 1.87 meters tall has a height of 73.6219 inches.
(Type an integer or a decimal.)

Answer: 73.6219

$\frac{1}{39.37} = \frac{1.87}{N}$ cross mult

$1(N) = 39.37(1.87)$

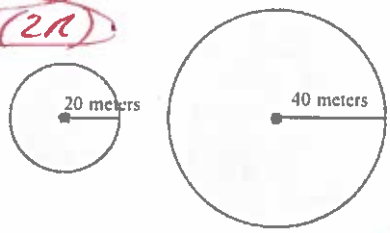
$N = 73.6219$

39.37 × 1.87 mult numbers

2 7 5 5 9
3 1 4 9 6
3 9 3 7
73.6219

---

91. Consider the circles at the right.



$C = 3.14(2R)$
$C = 3.14(2(20))$
$C = 3.14(40)$
$C = 125.60$

$C = \pi D$ $C = \pi(2R)$
$C = 3.14D$ $C = 3.14(2R)$
$C = 3.14(2R)$
$C = 3.14(2(40))$
$C = 3.14(80)$
$C = 251.20$

a. Approximate the circumference of each circle. Use $\pi = 3.14$.

The circumference of the smaller circle is approximately 125.60 meters.
(Round to the nearest hundredth as needed.)
The circumference of the larger circle is approximately 251.20 meters.
(Round to the nearest hundredth as needed.)

3.14 × 40 = 125.60

3.14 × 80 = 251.20

b. If the radius of a circle is doubled, is its corresponding circumference also doubled?

- [x] Yes
- [ ] No

Answers 125.60
251.20
Yes

---

92. One year, farmers received an average of $13.035 per bushel of wheat. How much did a farmer receive for selling 100 bushels of wheat?

The farmer received $ 1303.50. (Round to the nearest cent as needed.)

Answer: 1303.50

$\frac{1}{13.035} = \frac{100}{N}$ cross mult

$1(N) = 13.035(100)$

$N = 1303.50$

---

93. Perform the indicated operation.

1.7 + 0.06

1.7 + 0.06 = 1.76 (Type an integer or a decimal.)

Answer: 1.76

1.70 + 0.06 = 1.76

94. Find the decimal equivalent of the following fraction.

$\frac{17}{25}$

$\frac{17}{25} =$ 0.68

Answer: 0.68

17/25 long division

.68
25 | 17.00
150
200
-(200)
0 rem

---

95. Write as an equivalent decimal.

$\frac{3}{4}$

$\frac{3}{4} =$ 0.75

Answer: 0.75

3/4 long division

.75
4 | 3.00
-(28)
20
-(20)
0 rem

---

96. Write $7\frac{9}{20}$ as a decimal.

$7\frac{9}{20} =$ 7.45

Answer: 7.45

$7\frac{9}{20} = 7 + \frac{9}{20} = 7 + .45 = 7.45$

long division

.45
20 | 9.00
-(80)
100
-(100)
0 rem

---

97. Find the mean, median, and mode for the following set of numbers. If necessary, round the mean to one decimal place.

21, 28, 22, 23, 16

16, 21, 22, 23, 28 (rewrite order)

The mean is 22 (average)

(Type an integer or decimal rounded to one decimal place as needed. Use a comma to separate answers as needed.)

The median is 22 (middle) (median)

(Type an integer or decimal rounded to one decimal place as needed. Use a comma to separate answers as needed.)

Find the mode. Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

○ A. The mode is (there is no mode (most))
(Type an integer or decimal rounded to one decimal place as needed. Use a comma to separate answers as needed.)

✗ B. There is no mode.

Answers 22

22

B. There is no mode.

long division

22
5 | 110
-(10)
10
-(10)
0
rem

16
21
22
23
+ 28
110

98. A stereo normally priced at $730 is on sale for 5% off. Find the discount and the sale price.

The discount is $ 36.50

The sale price is $ 693.50

Answers 36.50

693.50

730
× .05
36.50 discount

730.00
− 36.50
693.50 SALE Price

99. A company borrows $73,000 for 5 years at a simple interest rate of 11.5%. Find the interest paid on the loan and the total amount paid.

The interest paid on the loan is $ 41,975

The total amount paid is $ 114,975

Answers 41,975

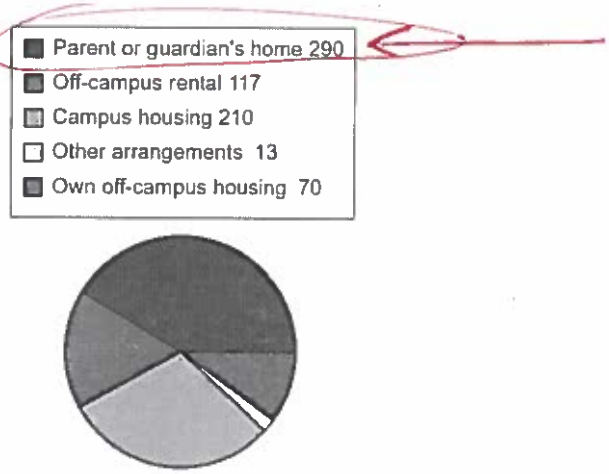
114,975

73000
× .575
41975.000 Interest

73000
+ 41975
114,975 Total amount paid

.115
× 5
.575

100. The circle graph is a result of surveying 700 college students. They were asked where they live while attending college. Use this graph to find where most of these college students live.



Choose the correct answer below.

- A. Parent or guardian's home
- B. Other arrangements
- C. Off-campus rental
- D. Campus housing
- E. Own off-campus housing

Answer: A. Parent or guardian's home

101. Find the square root.

$\sqrt{9}$

$\sqrt{9}$ = 3

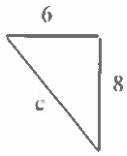
Answer: 3

$9 = 3 \cdot 3$

$\sqrt{9} =$

$3 =$

102. Find the length of the third side of the right triangle.



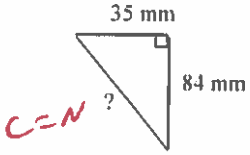
The length of the third side is 10.

Answer: 10

a = 6
b = 8
c = N
$a^2+b^2=c^2$
$(6)^2+(8)^2=c^2$
$36+64=c^2$
$100=c^2$
$\sqrt{100}=\sqrt{c^2}$
$10=c$

1
36
+64
100

103. Find the unknown length in the right triangle.



The length of the unknown side is 91 mm.

Answer: 91

a = 35
b = 84
c = N
$a^2+b^2=c^2$
$(35)^2+(84)^2=c^2$
$1225+7056=c^2$
$8281=c^2$
$\sqrt{8281}=\sqrt{c^2}$
$91=c$

104. Sketch the right triangle and find the length of the side not given. If necessary, approximate the length to the nearest thousandth.

leg = 12, leg = 5

What is the length of the side not given?

13 (Round to the nearest thousandth as needed.)

Answer: 13

a = 12
b = 5
c = N
$a^2+b^2=c^2$
$(12)^2+(5)^2=c^2$
$144+25=c^2$
$169=c^2$
$\sqrt{169}=\sqrt{c^2}$
$13=c$

105. Sketch the right triangle and find the length of the side not given.

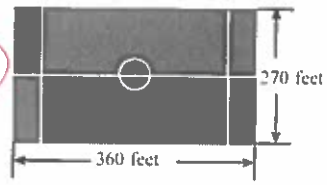
leg = 65, hypotenuse = 97

The unknown length is 72.
(Type an integer or decimal rounded to the nearest thousandth as needed.)

Answer: 72

a = 65
b = N
c = 97
$a^2+b^2=c^2$
$(65)^2+b^2=(97)^2$
$4225+b^2=9409$
$4225+b^2-4225=9409-4225$
$b^2=5184$
$\sqrt{b^2}=\sqrt{5184}$
$b=72$

106. A playing field is a rectangle that is 360 feet long by 270 feet wide. Find, to the nearest foot, the length of a straight-line run that started at one corner and went diagonally to end at the opposite corner.



c=N 270 = b $a^2+b^2=c^2$

360 = a $(360)^2+(270)^2=c^2$

$129600+72900=c^2$

$\sqrt{202500}=\sqrt{c^2}$

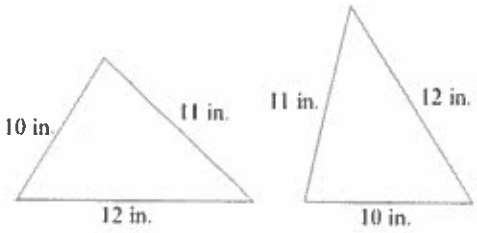
450 = c

The length of the straight-line run is 450 feet.
(Round to the nearest foot as needed.)

Answer: 450

---

107. Determine whether the pair of triangles is congruent. If congruent, state the reason why, such as SSS, SAS, or ASA.



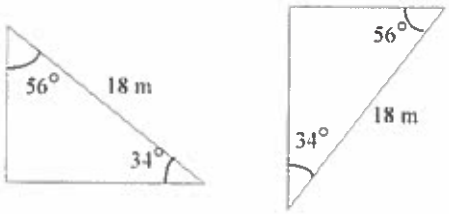
Choose the correct answer below.

- ○ Congruent by ASA
- ○ Congruent by SAS
- ☒ Congruent by SSS
- ○ Not congruent

Answer: Congruent by SSS

---

108. Determine whether the pair of triangles is congruent. If congruent, state the reason why, such as SSS, SAS, or ASA.



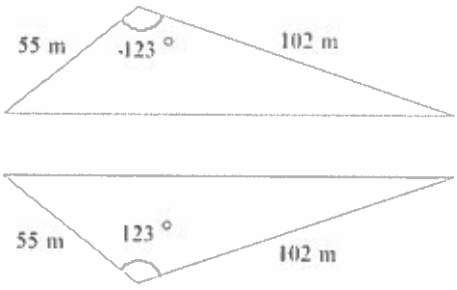
Choose the correct answer below.

- ☒ Congruent by ASA
- ○ Congruent by SAS
- ○ Congruent by SSS
- ○ Not congruent

Answer: Congruent by ASA

---

109. Determine whether the pair of triangles is congruent. If congruent, state the reason why, such as SSS, SAS, or ASA.



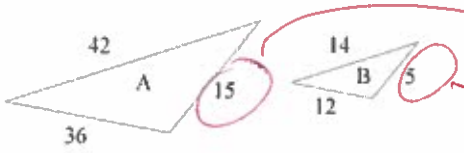
Choose the correct answer below.

- ○ Congruent by ASA
- ○ Congruent by SSS
- ☒ Congruent by SAS
- ○ Not congruent

Answer: Congruent by SAS

---

110. Triangles A and B are similar triangles. Find the ratio of the corresponding sides of triangle A to triangle B.



$\frac{A}{B} = \frac{15}{5} = \frac{3(5)}{1(5)} = \frac{3}{1} =$

The ratio of the corresponding sides of triangles A to B is $\frac{3}{1}$.

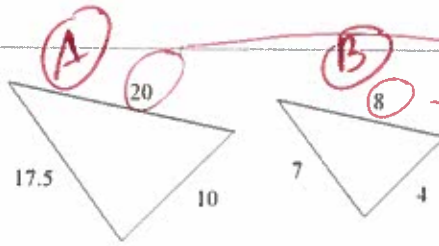
(Simplify your answer.)

Answers 3

1

---

111. Find the ratio of the corresponding sides of the given similar triangles.



$\frac{A}{B} = \frac{20}{8} = \frac{(2)(2)(5)}{(2)(2)(2)} = \frac{5}{2} =$

$2 \mid 20 \quad 2 \mid 8$
$2 \mid 10 \quad 2 \mid 4$
$5 \mid 5 \quad 2 \mid 2$
$1 \quad 1$

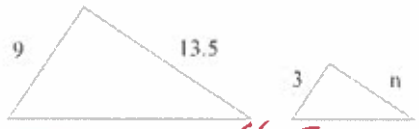
Primes 2, 3, 5, 7

The ratio of the corresponding sides of the first triangle to the second triangle is $\frac{5}{2}$.

(Type the ratio as a simplified fraction.)

Answer: $\frac{5}{2}$

112. Given that the pair of triangles is similar, find the length of the side labeled n.



n = 4.5

Answer: 4.5

$\frac{9}{13.5} = \frac{3}{N}$ (cross mult)

$9(N) = 13.5(3)$

$9N = 40.5$

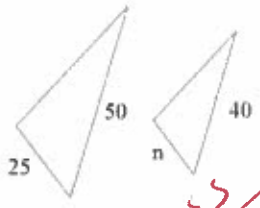
$\frac{9N}{9} = \frac{40.5}{9}$

$N = 4.5$

long division: $9 \overline{)40.5}$ (36) 45 −(45) 0

---

113. Given that the pair of triangles is similar, find the length of the side labeled n.



n = 20

Answer: 20

$\frac{25}{50} = \frac{N}{40}$ (cross mult)

$25(40) = 50N$

$1000 = 50N$

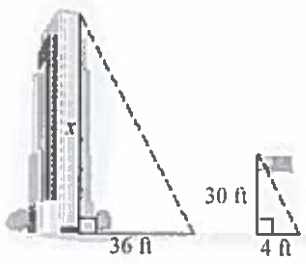
$\frac{1000}{50} = \frac{50N}{50}$

$20 = N$

long division: $50 \overline{)1000}$ 20, −(100), 0, −(0), 0

---

114. A triangle is formed by the building's height and shadow. Another triangle is formed by the flagpole's height and shadow. Using the following diagram, find the height of the building.



The height of the building is 270 feet.

Answer: 270

$\frac{x}{36} = \frac{30}{4}$ (cross mult)

$4(x) = 36(30)$

$4x = 1080$

$\frac{4x}{4} = \frac{1080}{4}$

$x = 270$

---

115. If a 40-foot tree casts a 16-foot shadow, find the length of the shadow cast by a 24-foot tree.

The length of the tree's shadow is 9.6 feet.
(Type an integer or a decimal rounded to the nearest tenth.)

Answer: 9.6

$\frac{40}{16} = \frac{24}{N}$ (cross mult)

$40(N) = 16(24)$

$40N = 384$

$\frac{40N}{40} = \frac{384}{40}$

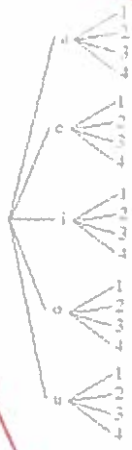
$N = 9.6$

long division: 9.6, $40 \overline{)384.0}$, −(360), 240, −(240), 0 rem

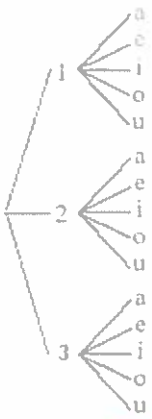
116. Draw a tree diagram for choosing a vowel, (a, e, i, o, u) and then a number (1, 2, 3 or 4). Use the diagram to find the number of possible outcomes.

○ A.

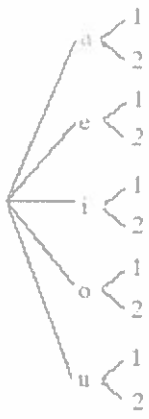
X ○ B.



○ C.

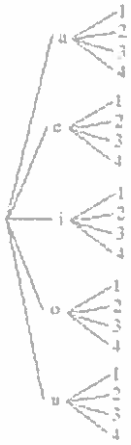


○ D.



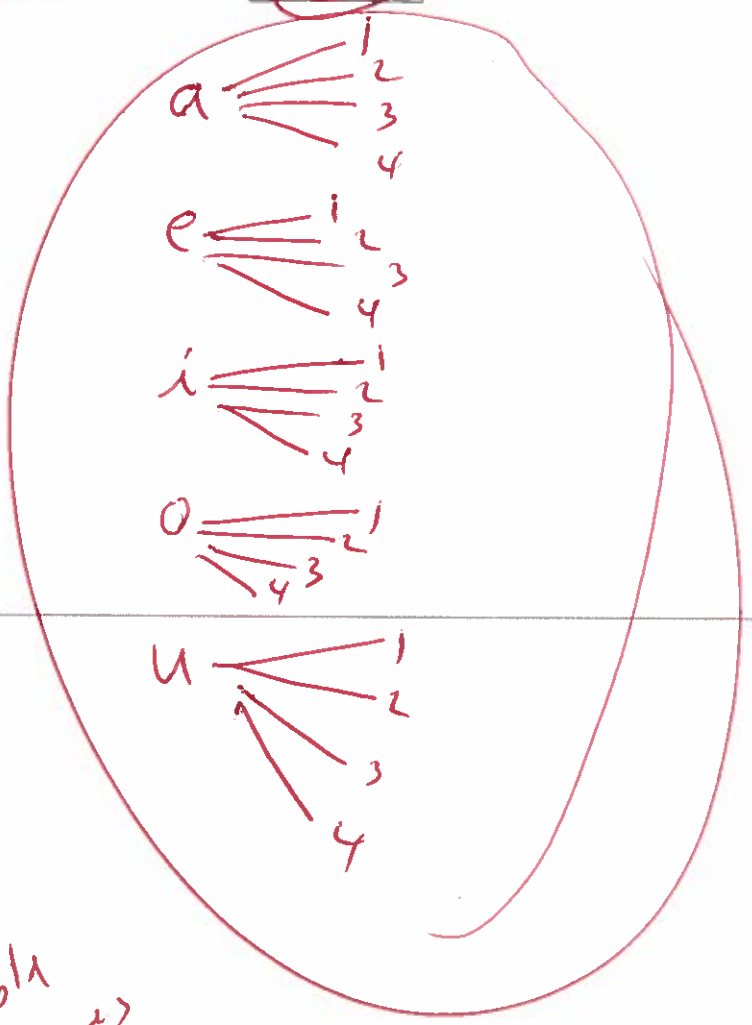
Based on the tree, what is the number of possible outcomes? 20

Answers



B.

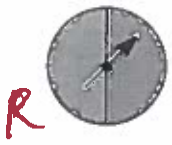
20



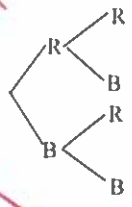
4
4
4
4
4
+ 4
20

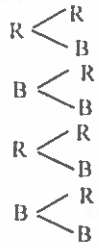
Possible Outcomes

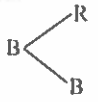
117. Draw a tree diagram for spinning Spinner B 2 times. Use the diagram to find the number of possible outcomes.

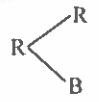


Choose the correct tree diagram below.

A. 

B. 

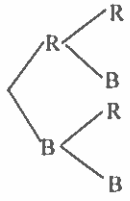
C. 

D. 

Based on the tree, what is the number of possible outcomes?

4

Answers

A. 

4

118. If a single 8-sided die is tossed once, find the probability of rolling a 6.

The probability is 1/8. (Type an integer or a simplified fraction.)

Answer: 1/8

1, 2, 3, 4, 5, 6, 7, 8 ← Possible

Prob of 6 / all = 1/8

119. If a single 6-sided die is tossed once, find the probability of rolling a 2 or a 6.

The probability is 1/3. (Type an integer or a simplified fraction.)

Answer: 1/3

1, 2, 3, 4, 5, 6 ← Possible

Prob 2 or 6 / all = 1+1/6 = 2/6 = 2(1)/2(3) = 1/3

120. If a single 20-sided die is tossed once, find the probability of rolling an odd number.

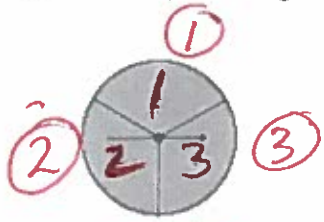
The probability is 1/2. (Type an integer or a simplified fraction.)

Answer: 1/2

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 ← Possible

odd / all = 10/20 = 10(1)/10(2) = 1/2

121. Suppose the spinner shown is spun once. Find the probability of spinning 3.

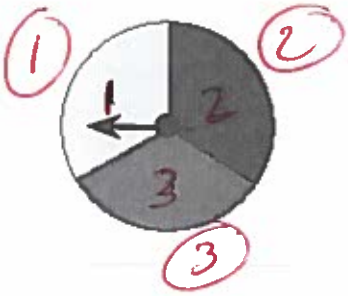


The probability is $\frac{1}{3}$. (Type an integer or a simplified fraction.)

Answer: $\frac{1}{3}$

---

122. Suppose that the spinner shown is spun once. Find the probability of the event that the result of a spin is 1, 2, or 3.



The probability is 1.
(Simplify your answer.)

Answer: 1

---

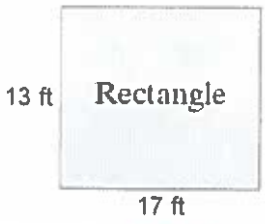
123. A marble is selected at random from a jar containing 2 red marbles, 5 yellow marbles, and 4 green marbles.

What is the probability that the marble is red?

The probability that the marble is red is $\frac{2}{11}$. (Type an integer or a simplified fraction.)

Answer: $\frac{2}{11}$

124. Find the perimeter of the following figure.



W = 13

L = 17

$P = 2L + 2W$

$P = 2(17) + 2(13)$

$P = 34 + 26$

$P = 60$

Perimeter = 60 (1) ft

(1) ○ sq. ft
✗ ft

Answers 60

(1) ft

---

125. Find the perimeter of the following figure.

L = 26

W = 16

$P = 2L + 2W$

$P = 2(26) + 2(16)$

$P = 52 + 32$

$P = 84$

Perimeter = 84 (1) cm

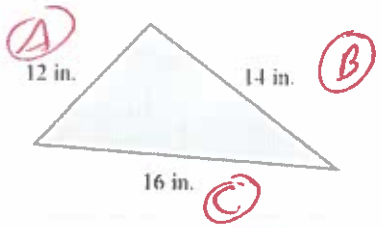
(1) ○ sq. cm
✗ cm

Answers 84

(1) cm

---

126. Find the perimeter of the following figure.



side A = 12
side B = 14
side C = 16

P = A + B + C
P = 12 + 14 + 16
P = 26 + 16
P = 42

The perimeter is 42 (1) in

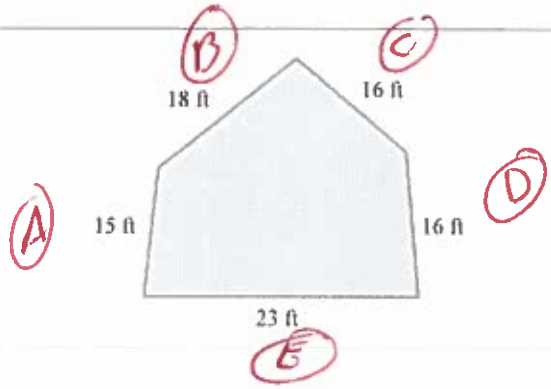
(1) ○ sq. in.
☒ in.

Answers 42

(1) in.

---

127. Find the perimeter of the figure shown to the right.



P = A + B + C + D + E
P = 15 + 18 + 16 + 16 + 23
P = 33 + 16 + 16 + 23
P = 49 + 16 + 23
P = 65 + 23
P = 88

Perimeter = 88 (1) ft

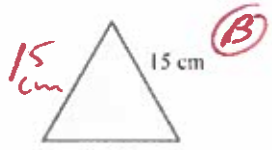
(1) ○ sq. ft.
☒ ft.

Answers 88

(1) ft.

---

128. Find the perimeter of the regular polygon shown to the right.



P = A + B + C
P = 15 + 15 + 15
P = 30 + 15
P = 45

Perimeter = 45 (1) cm

(1) ○ sq cm
☒ cm

Answers 45

(1) cm

---

129. A computer has shape of a rectangular solid. Find the volume of the computer, with dimensions of 5 inches by 5 inches by 5.2 inches.

The volume of the computer is 130 (1) cu in
(Simplify your answer. Type an integer or a decimal.)

(1) ○ sq in.
○ in.
✗ cu in.

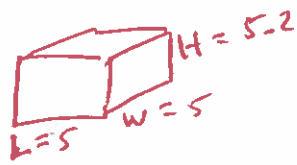
Answers 130.0

(1) cu in.

$V = LWH$
$V = (5)(5)(5.2)$
$V = 25(5.2)$
$V = 130$

$L = 5$
$W = 5$
$H = 5.2$

$25 \times 5.2 = 130.0$



---

130. Insert <, >, or = in the space between the paired numbers to make the statement true.

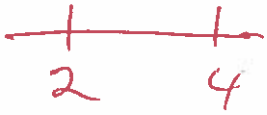
2 __ 4

2 (1) < 4

(1) ○ >
○ =
○ <

Answer: (1) <

$2 < 4$



---

131. Insert <, >, or = in the space between the paired numbers to make the statement true.

5 3

5 > 3

Answer: >

---

132. Insert <, >, or = in the space between the paired numbers to make the statement true.

5.89 ? 5.89

5.89 = 5.89

Answer: =

$5.89 = 5.89$

Same

133. Insert <, >, or = in the space between the paired numbers to make the statement true.

0 __ 8

0 (1) < 8

(1) ○ >
○ =
○ <

Answer: (1) <

0 8

0 < 8

134. Use the commutative and associative properties to simplify the expression.

(16 + a) + 16

(16 + a) + 16 = a+32

Answer: a + 32

PEMDAS

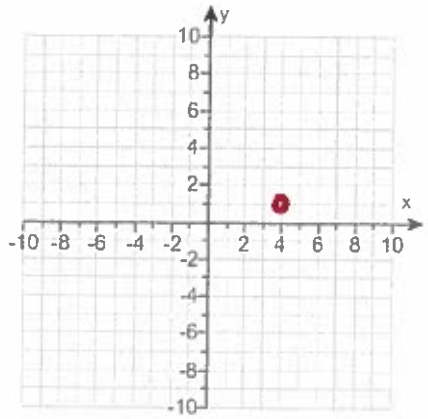
(16+a)+16 =
16+a+16 =
a+16+16 =
a+32 =

135. Plot the ordered pair (4,1). State in which quadrant or on which axis the point lies.

Plot the ordered pair on the graph to the right.

In which quadrant, or on which axis, does the point lie?

- ○ on the y-axis
- ✗ I
- ○ IV
- ○ III
- ○ on the x-axis
- ○ II

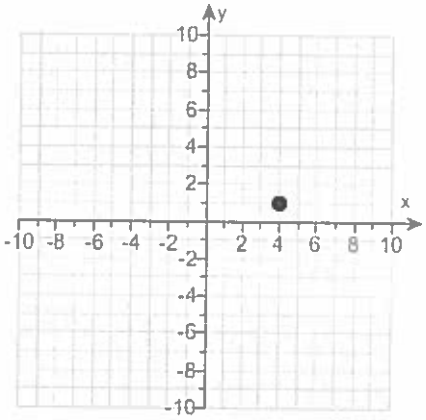


(4, 1)

right 4

up 1

Answers



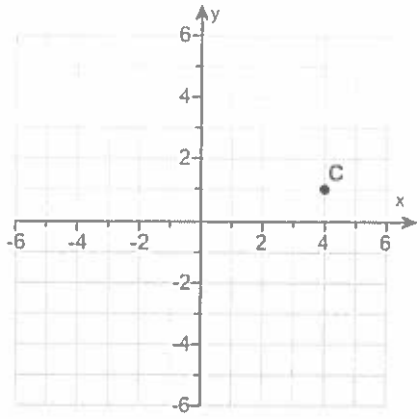
I

136.

Find the x- and y-coordinates of the point C.

The coordinates of C are (4,1).
(Type an ordered pair.)

4, 1
right 4
up 1



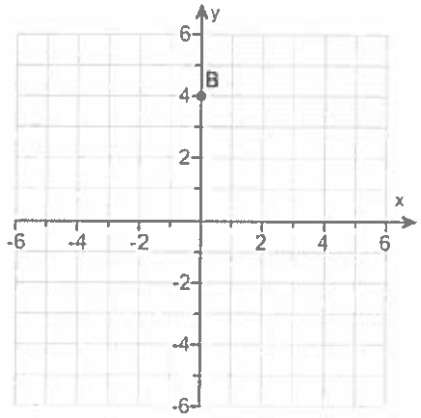
Answer: (4,1)

137.

Find the x- and y-coordinates of the point B.

The coordinates of B are (0,4).
(Type an ordered pair.)

(0, 4)
right 0
up 4



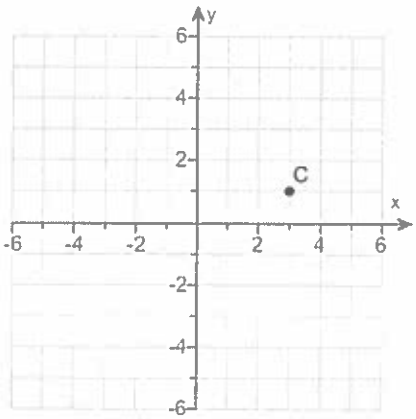
Answer: (0,4)

138.

Find the x- and y-coordinates of the point C.

The coordinates of C are (3,1).
(Type an ordered pair.)

(3, 1)
right 3
up 1



Answer: (3,1)

139.

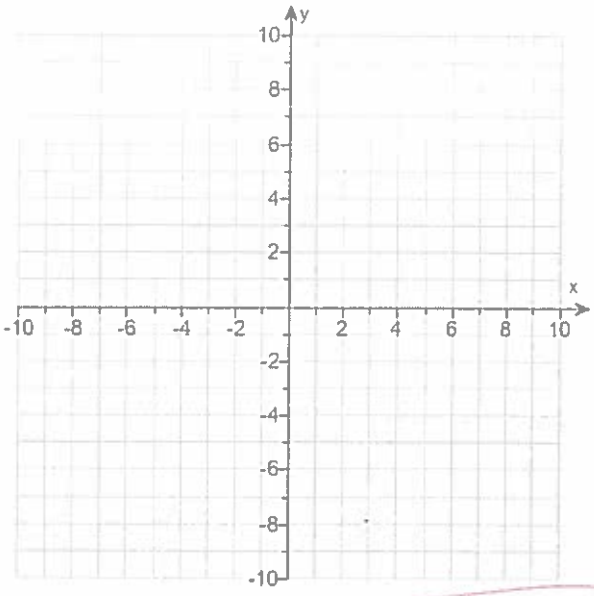
For the equation, find three ordered pair solutions by completing the table. Then use any two of the ordered pairs to graph the equation.

$y = \frac{1}{4}x$

Complete the table below.

x	y
0	0
−8	−2
8	2

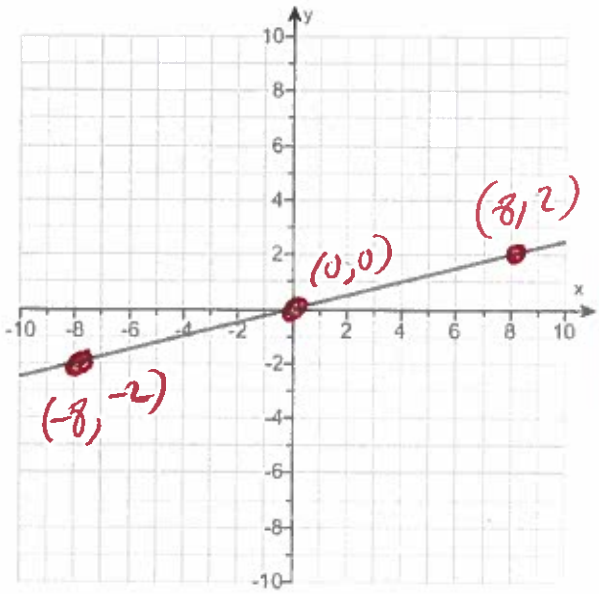
Use the graphing tool to graph the equation.



Answers 0

−2

2



$y = \frac{1}{4}x$

$y = \frac{1}{4}(-8)$

$y = \frac{-8}{4}$

$y = -2$

$y = \frac{1}{4}(0)$

$y = 0$

$y = \frac{1}{4}(8)$

$y = \frac{8}{4}$

$y = 2$

x	y
−8	−2
0	0
8	2

140.

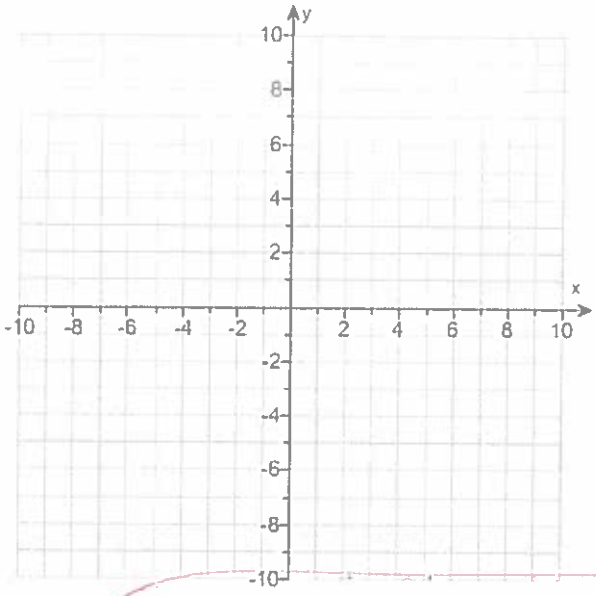
For the following equation, find three ordered pair solutions by completing the table. Then use the ordered pairs to graph the equation.

$y = -2x + 8$

Find three ordered pair solutions of the given equation.

x	y
0	8
1	6
2	4

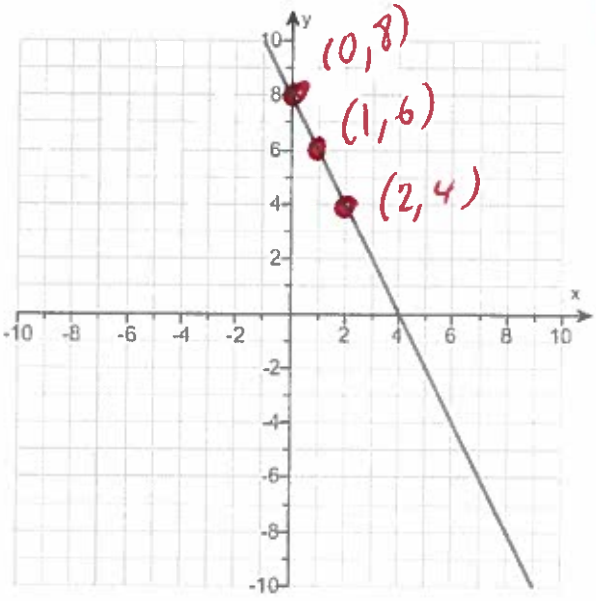
Use the graphing tool to graph the line.



Answers 8

6

4



$y = -2x + 8$

$y = -2(0) + 8$

$y = 0 + 8$

$y = 8$

x	y
0	8
1	6
2	4

$y = -2(1) + 8$

$y = -2 + 8$

$y = 6$

$y = -2(2) + 8$

$y = -4 + 8$

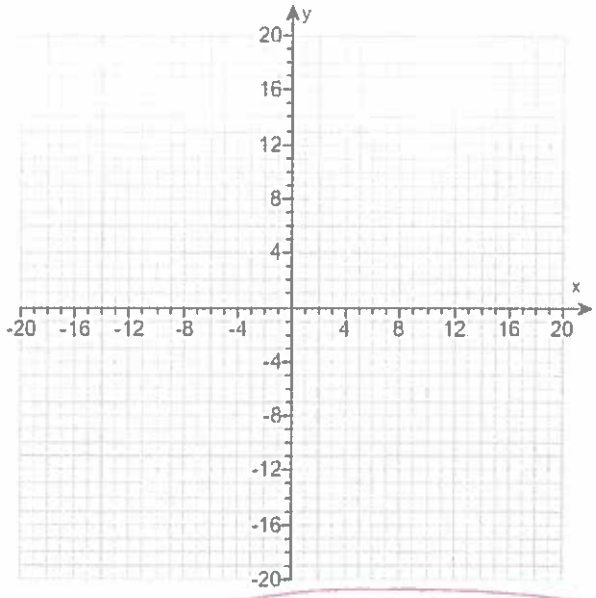
$y = 4$

141.

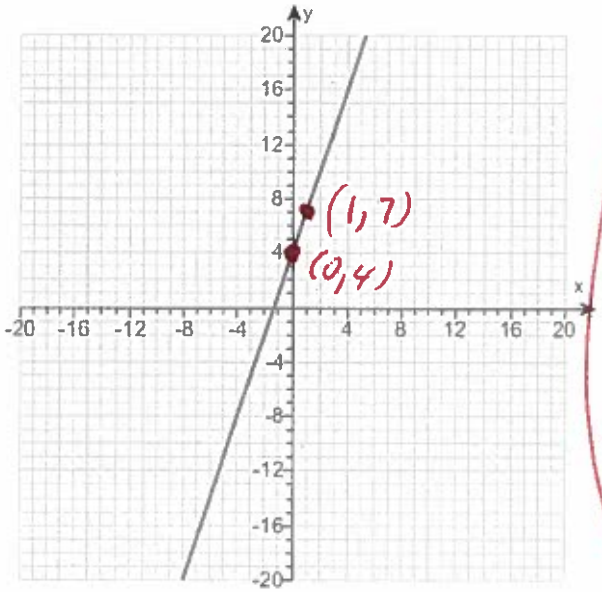
Graph the equation.

$y = 3x + 4$

Use the graphing tool to graph the line.



Answer:



$y = 3x + 4$

$y = 3(0) + 4$

$y = 0 + 4$

$y = 4$

x	y
0	4
1	7

$y = 3(1) + 4$

$y = 3 + 4$

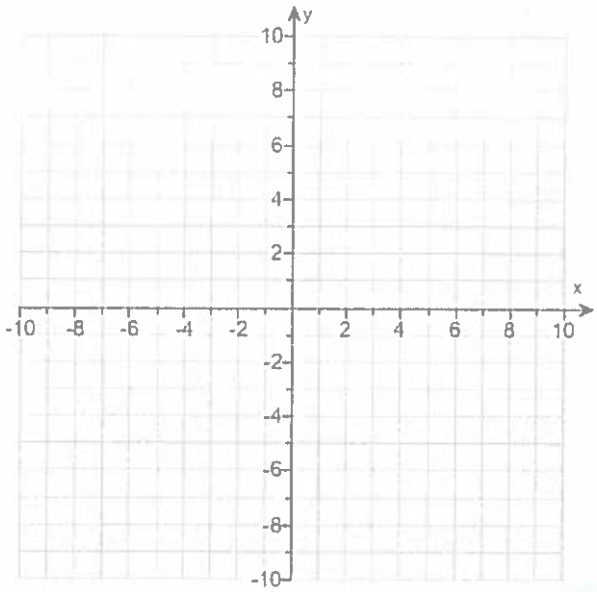
$y = 7$

142.

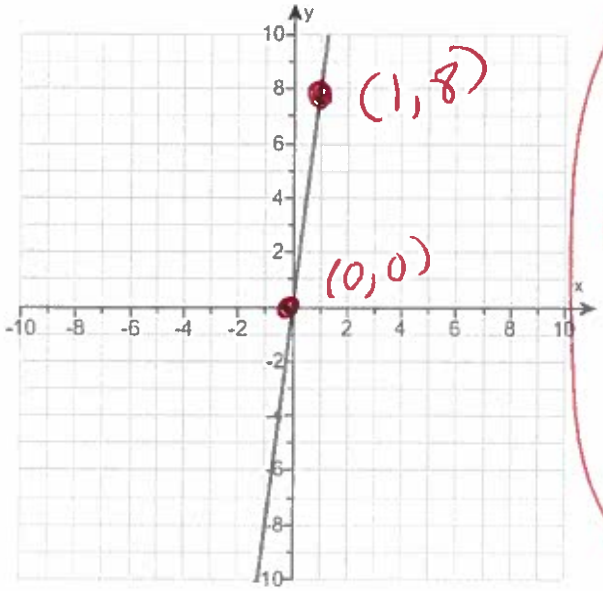
Graph the linear equation.

$y = 8x$

Use the graphing tool to graph the linear equation.



Answer:



$y = 8x$

$y = 8(0)$

$y = 0$

$y = 8(1)$

$y = 8$

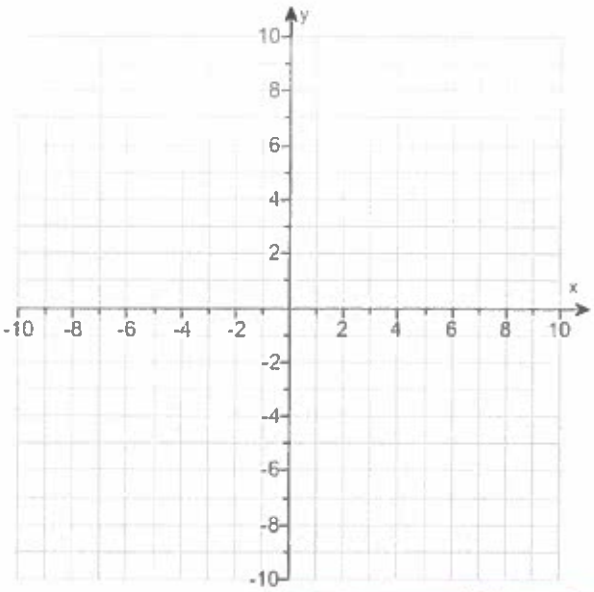
x	y
0	0
1	8

143.

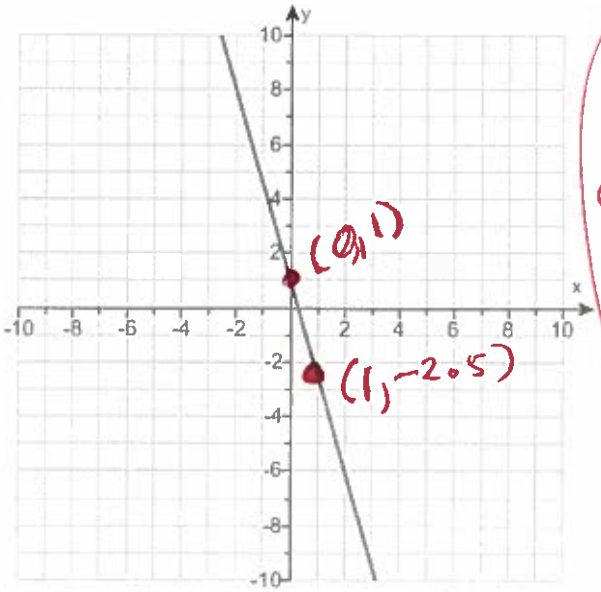
Graph the linear equation.

$y = -3.5x + 1$

Use the graphing tool to graph the equation.



Answer:



$y = -3.5x + 1$

$y = 3.5(0) + 1$

$y = 0 + 1$

$y = 1$

x	y
0	1
1	-2.5

$y = -3.5(1) + 1$

$y = -3.5 + 1$

$y = -2.5$

144. Given the following function, find f(− 5), f(0), and f(3).

f(x) = − 3x − 4

f(− 5) = 11

f(0) = −4

f(3) = −13

$f(x) = -3x-4$
$f(-5) = -3(-5)-4$
$f(-5) = 15-4$
$f(-5) = 11$

PEMDAS
$f(x) = -3x-4$
$f(0) = -3(0)-4$
$f(0) = 0-4$
$f(0) = -4$

$f(x) = -3x-4$
$f(3) = -3(3)-4$
$f(3) = -9-4$
$f(3) = -13$

Answers 11

− 4

− 13

---

145. Given the following function, find f(− 5), f(0), and f(2).

$f(x) = x^2 + 3$

f(− 5) = 28

f(0) = 3

f(2) = 7

PEMDAS
$f(x) = x^2+3$
$f(-5) = (-5)^2+3$
$f(-5) = (-5)(-5)+3$
$f(-5) = 25+3$
$f(-5) = 28$

$f(x) = x^2+3$
$f(0) = (0)^2+3$
$f(0) = (0)(0)+3$
$f(0) = 0+3$
$f(0) = 3$

$f(x) = x^2+3$
$f(2) = (2)^2+3$
$f(2) = (2)(2)+3$
$f(2) = 4+3$
$f(2) = 7$

Answers 28

3

7

---

146. Find f(− 4), f(0) and f(3) for the following function.

f(x) = − 2x

f(− 4) = 8

f(0) = 0

f(3) = −6

PEMDAS
$f(x) = -2x$
$f(-4) = -2(-4)$
$f(-4) = 8$

$f(x) = -2x$
$f(0) = -2(0)$
$f(0) = 0$

$f(x) = -2x$
$f(3) = -2(3)$
$f(3) = -6$

Answers 8

0

− 6

---

147. Given the function $f(x) = -2x + 4$, find the indicated values.

(a) f(4)
(b) f(b)

(a) f(4) = -4 (Simplify your answer.)

(b) f(b) = $-2b+4$ (Simplify your answer.)

Answers -4

$-2b+4$

PEMDAS PEMDAS

$f(x) = -2x+4$ $f(x) = -2x+4$

$f(4) = -2(4)+4$ $f(b) = -2(b)+4$

$f(4) = -8+4$ $f(b) = -2b+4$

$f(4) = -4$

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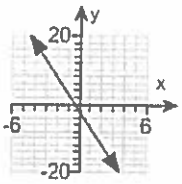
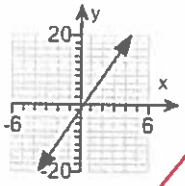
148. Graph the function.

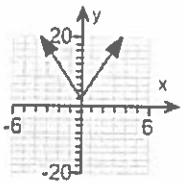
$f(x) = 5x - 2$

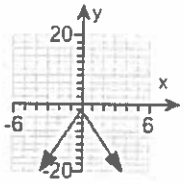
x	f(x)
0	-2
1	3

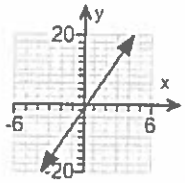
Choose the correct graph below.

A. 

B. 

C. 

D. 

Answer: B. 

$f(x) = 5x-2$ $f(x) = 5x-2$

$f(0) = 5(0)-2$ $f(1) = 5(1)-2$

$f(0) = 0-2$ $f(1) = 5-2$

$f(0) = -2$ $f(1) = 3$

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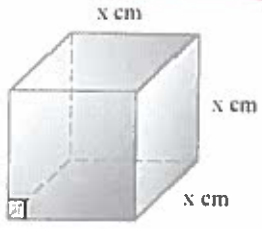
149. The function $V(x) = x^3$ may be used to find the volume of a cube with side length x. Find the volume of a cube whose side is 8 centimeters.



$V(x) = x^3$

$V(8) = (8)^3$

$V(8) = (8)(8)(8)$

The volume is 512 cubic centimeters. (Type an integer or a decimal.)

Answer: 512

$8 \times 8 = 64$ $64 \times 8 = 512$

$V(8) = 64(8)$

$V(8) = 512$