Student: _____ Date: _____	**Instructor:** Alfredo Alvarez **Course:** Martin-Gay Basic Math	**Assignment:** MATH123FIESTAD101

1. Add.

$$\begin{array}{r} 82 \\ +\ 16 \\ \hline \end{array}$$
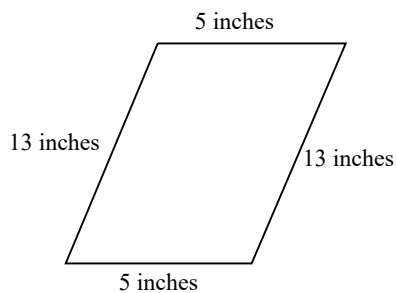
The sum is [_____].

   Answer: 98

2. Add.

$$\begin{array}{r} 13 \\ 21 \\ +\ 44 \\ \hline \end{array}$$

The sum is [_____].

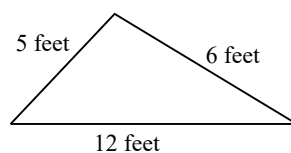   Answer: 78

3. Find the perimeter of the figure.

5 inches

13 inches

13 inches

5 inches

The perimeter is [_____] (1) [_____]
(Type a whole number.)

(1) ○ square inches.
    ○ cubic inches.
    ○ inches.

   Answers 36

           (1) inches.

4. Find the perimeter of the figure.

5 feet   6 feet
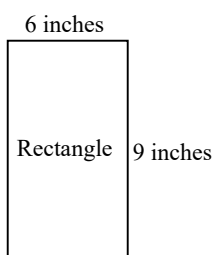
12 feet

The perimeter is [   ] (1) [   ]
(Type a whole number.)

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

Answers 23

(1) feet.

5. Find the perimeter of the figure.

6 inches

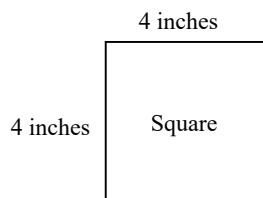Rectangle | 9 inches

The perimeter is [   ] (1) [   ]
(Type a whole number.)

(1) ○ inches.
    ○ square inches.
    ○ cubic inches.

Answers 30

(1) inches.

6. Find the perimeter of the figure.
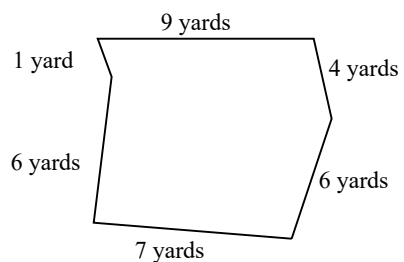
4 inches

4 inches | Square

The perimeter is ☐ (1) ☐
(Type a whole number.)

(1) ○ cubic inches.
   ○ inches.
   ○ square inches.

Answers 16

(1) inches.

7. Find the perimeter of the figure.

9 yards

1 yard

4 yards

6 yards

6 yards

7 yards

The perimeter is ☐ (1) ☐
(Type a whole number.)

(1) ○ yards.
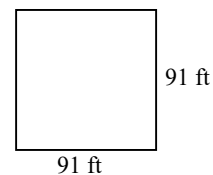   ○ square yards.
   ○ cubic yards.

Answers 33

(1) yards.

8. What is 285 increased by 34?

285 increased by 34 is ☐ .

Answer: 319

9. A permanent game board is made of granite. Find the perimeter of the square playing board.

91 ft

91 ft

The perimeter is [   ] (1) [   ]

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

Answers 364

(1) feet.

10.

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

State (1) [   ] has the most stores.

The Top States for the Stores

State	Number of Stores
A	34
B	122
C	72
D	42
E	75
F	62
G	55
H	77
K	49
L	108

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

Answer: (1) B

11. Find the difference.

12 − 12

12 − 12 = [   ]

Answer: 0

12. Subtract.

```
   55
−  32
```

The difference is [ ].

Answer: 23

---

13. Subtract.

```
   71
−  33
```

The difference is [ ].

Answer: 38

---

14. Subtract. Check by adding.

```
   9 0
−  7 7
```

The difference is [ ].

Answer: 13

---

15. Subtract 6 from 7.

The difference is [ ].

Answer: 1

---

16. Find the difference of 88 and 46.

The difference is [ ].

Answer: 42

---

17. Subtract 38 from 90.

The difference is [ ].

Answer: 52

18. Find 52 subtracted from 100.

The difference is [   ] .

Answer: 48

---

19. Evelyn Abrams is reading a 646-page book. If she has just finished reading page 171, how many more pages must she read to finish the book?

[   ] pages

Answer: 475

---

20. The peak of Mt. A is 20,730 feet above sea level. The peak of Mt. B is 12,242 feet above sea level. How much higher is the peak of Mt. A than Mt. B?

20,730 feet   12,242 feet
Mt. A   Mt. B
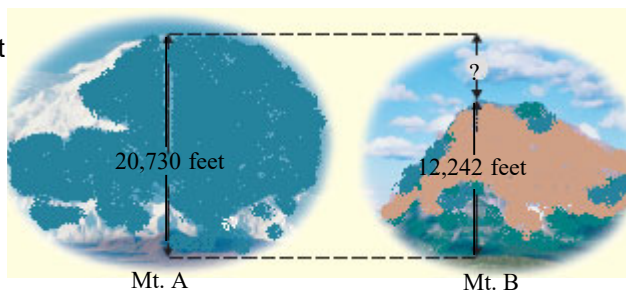
The peak of Mt. A is [   ] feet higher than the peak of Mt. B.

Answer: 8488

---

21. Suppose one dam is 583 feet high. Another dam is 569 feet high. How much taller is the first dam than the second dam?

The first dam is [   ] feet taller than the second dam.

Answer: 14

---

22. Subtract.

    43 − 36

The answer is [   ] .

Answer: 7

---

23. Round 915 to the nearest ten.

915 rounded to the nearest ten is [   ] .

Answer: 920

---

24. Round 2,264 to the nearest hundred.

The number 2,264 rounded to the nearest hundred is ⬚ .

Answer: 2,300

25. Round 697 to the nearest ten.

697 rounded to the nearest ten is ⬚ .

Answer: 700

26. Round 27,343 to the nearest thousand.

27,343 rounded to the nearest thousand is ⬚ .

Answer: 27,000

27. A university had a total undergraduate enrollment of 31,946 students in fall 2012. Round this number to the nearest thousand.

The total undergraduate enrollment of students, rounded to the nearest thousand is ⬚ .

Answer: 32,000

28. Estimate the difference by rounding each number to the nearest hundred.

$$
\begin{array}{r}
1673 \\
-\ 1392 \\
\hline
\end{array}
$$

The estimated difference is ⬚ .

Answer: 300

29. Use the distributive property to rewrite each expression.

    4(3 + 6)

4(3 + 6) = ⬚
(Type an expression. Do not simplify.)

Answer: 4 • 3 + 4 • 6

30.
Multiply.

$$
\begin{array}{r}
62 \\
\times\ 5 \\
\hline
\end{array}
$$

$$
\begin{array}{r}
62 \\
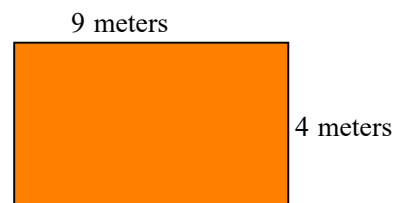\times\ \ \ \ \ 5 \\
\hline
\end{array}
$$

Answer: 310

31.
Multiply.

$$
\begin{array}{r}
932 \\
\times\ \ \ 6 \\
\hline
\end{array}
$$

$$
\begin{array}{r}
932 \\
\times\ \ \ \ \ 6 \\
\hline
\end{array}
$$

Answer: 5592

---

32. Multiply.

$$
\begin{array}{r}
73 \\
\times\ 68 \\
\hline
\end{array}
$$

The product is ⬚ .

Answer: 4964

33.
Find the area and the perimeter of the rectangle shown to the right.

9 meters

4 meters

The area of the rectangle is ⬚ (1) ⬚

The perimeter of the rectangle is ⬚ (2) ⬚

(1) ◯ square meters.   (2) ◯ square meters.
    ◯ meters.   ◯ meters.
    ◯ cubic meters.   ◯ cubic meters.

Answers 36

(1) square meters.

26

(2) meters.

34.

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

17 feet

50 feet
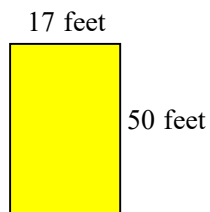
The area of the rectangle is [_____] (1) [_____]

The perimeter of the rectangle is [_____] (2) [_____]

(1) ◯ square feet.   (2) ◯ cubic feet.
   ◯ feet.   ◯ feet.
   ◯ cubic feet.   ◯ square feet.

Answers 850

      (1) square feet.

      134

      (2) feet.

---

35.   Find the sum of 29 and 5.

The sum is [_____].

  Answer: 34

---

36.   Find the difference of 17 and 4.

The difference is [_____]. (Simplify your answer.)

  Answer: 13

---

37.   Find the following quotient.

    $45 \div 5$

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

◯ **A.** $45 \div 5 =$ [_____] (Simplify your answer.)

◯ **B.**   The answer is undefined.

  Answer: A. $45 \div 5 =$ [**9**] (Simplify your answer.)

38. Find the following quotient.

$60 \div 6$

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

○ **A.** $60 \div 6 = \underline{\hspace{2cm}}$ (Simplify your answer.)

○ **B.** The answer is undefined.

Answer: A. $60 \div 6 = \boxed{\textbf{10}}$ (Simplify your answer.)

---

39. Find the following quotient.

$0 \div 8$

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

○ **A.** $0 \div 8 = \underline{\hspace{2cm}}$ (Simplify your answer.)

○ **B.** The quotient is undefined.

Answer: A. $0 \div 8 = \boxed{\textbf{0}}$ (Simplify your answer.)

---

40. Find the following quotient.

$45 \div 1$

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

○ **A.** $45 \div 1 = \underline{\hspace{2cm}}$ (Simplify your answer.)

○ **B.** The answer is undefined.

Answer: A. $45 \div 1 = \boxed{\textbf{45}}$ (Simplify your answer.)

---

41. Find the following quotient.

$\dfrac{40}{40}$

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

○ **A.** $\dfrac{40}{40} = \underline{\hspace{2cm}}$ (Simplify your answer.)

○ **B.** The answer is undefined.

Answer: A. $\dfrac{40}{40} = \boxed{\textbf{1}}$ (Simplify your answer.)

42. Find the quotient.

$$\frac{45}{5}$$

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

   ○ **A.** $\frac{45}{5}$ = _____

   ○ **B.** The answer is undefined.

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

---

43. Find the following quotient.

$$56 \div 7$$

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

   ○ **A.** $56 \div 7$ = _____ (Simplify your answer.)

   ○ **B.** The answer is undefined.

Answer: A. $56 \div 7$ = | **8** | (Simplify your answer.)

---

44. Divide the following and then check by multiplying.

$$3\overline{)84}$$

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 _____ .

   ○ **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 | **28** | .

45. Divide the following and then check by multiplying.

$48 \div 8$

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: A. The quotient does not have a remainder. The quotient is [**6**] .

---

46. Divide the following and then check by multiplying.

$8\overline{)469}$

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 [**58**] R [**5**] .

---

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

20, 25, 12, 26, 18, 19

The average value is [ ] .

Answer: 20

---

48. What is the total of 32 and 8?

The total of 32 and 8 is [ ] .

Answer: 40

---

49. 40 times 30 is what number?

40 times 30 is [ ] .

Answer: 1200

50. A vacant lot in the shape of a rectangle measures 70 feet by 50 feet.

    a. What is the perimeter of the lot?
    b. What is the area of the lot?

50 feet

70 feet
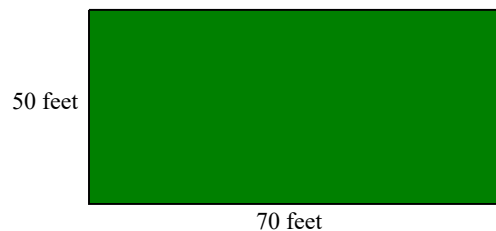
    a. The perimeter of the lot is ⬚ (1) ⬚

    b. The area of the lot is ⬚ (2) ⬚

(1) ◯ feet.   (2) ◯ cubic feet.
    ◯ square feet.   ◯ feet.
    ◯ cubic feet.   ◯ square feet.

Answers 240

      (1) feet.

      3500

      (2) square feet.

---

51. There are 24 hours in a day. How many hours are in 3 days?

There are ⬚ hours in 3 days.

Answer: 72

---

52. The average weekly pay for a records clerk is $760. If the clerk works 40 hours in one week, what is his or her hourly pay?

The hourly pay is $⬚ an hour.

Answer: 19

---

53. Six ounces of canned fish in oil has 306 calories. How many calories does 1 ounce have?

One ounce of canned fish in oil will have ⬚ calories. (Simplify your answer.)

Answer: 51

---

54. Find the value of the expression.

    5^2

$5^2 = $ ⬚

Answer: 25

55.
Find the square root.

$$\sqrt{25}$$

$\sqrt{25} = $ [　　　　　]

Answer: 5

---

56. Simplify.

$$25 + 5 \cdot 8$$

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

- ○ **A.** $25 + 5 \cdot 8 = $ _____
- ○ **B.** The expression is undefined.

Answer: A. $25 + 5 \cdot 8 = $ [　**65**　]

---

57. Simplify.

$$36 \div 6 - 3$$

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

- ○ **A.** $36 \div 6 - 3 = $ _____
- ○ **B.** The expression is undefined.

Answer: A. $36 \div 6 - 3 = $ [　**3**　]

---

58. Simplify.

$$3 \cdot 3 + 9 \cdot 9$$

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

- ○ **A.** $3 \cdot 3 + 9 \cdot 9 = $ _____
- ○ **B.** The expression is undefined.

Answer: A. $3 \cdot 3 + 9 \cdot 9 = $ [　**90**　]

---

59. Simplify.

   $(2 + 3) \cdot (7 - 4)$

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

   ○ **A.** $(2 + 3) \cdot (7 - 4) = $ _____

   ○ **B.** The expression is undefined.

   Answer: A. $(2 + 3) \cdot (7 - 4) = $ | **15** |

---

60. Write a fraction to represent the shaded part of the figure.
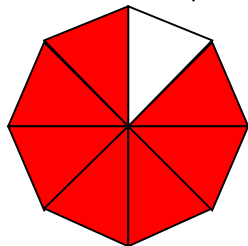
   The fraction representing the shaded part is | |.

   Answer: $\dfrac{7}{8}$

61.

   Write a fraction to represent the shaded region of the figure.
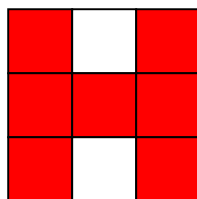
   Answer: $\dfrac{7}{9}$

   The fraction that represents the shaded region of this figure is | |.

---

62. Write a fraction to represent the shaded region of the figure.
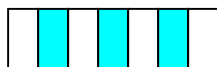
   A fraction which represents the figure is | |.

   Answer: $\dfrac{3}{7}$

63. Type a fraction to represent the shaded part.

What is the fraction represented by the shaded part?

[＿＿＿＿＿＿] (Do not simplify.)

Answer: $\dfrac{5}{12}$

64.

Write a fraction to represent the shaded region of the figure.
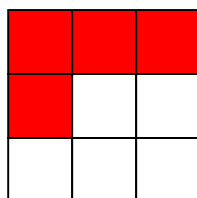
Answer: $\dfrac{4}{9}$

The fraction that represents the shaded region of this figure is [＿＿＿＿＿＿] .

65. Write a fraction to represent the shaded part of the syringe.

The fraction represented by the shaded parts is [＿＿＿＿＿＿] .

Answer: $\dfrac{7}{8}$

66. Write a fraction to represent the shaded part of the distance.
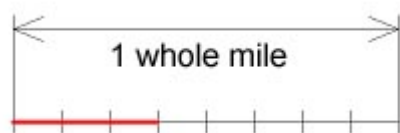
The fraction that represents the shaded part is [＿＿＿＿＿＿] .

Answer: $\dfrac{3}{8}$

67. Draw and shade a part of a diagram to represent the fraction.

$\frac{4}{7}$ of a diagram

Which shaded region below represents $\frac{4}{7}$?

○ **A.**

○ **B.**

○ **C.**

○ **D.**

Answer:
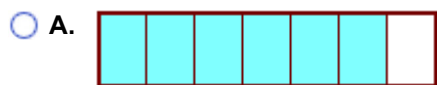
D.

68. Draw and shade a part of a figure to represent the fraction.

$\frac{5}{6}$ of a figure

Which shaded region below represents $\frac{5}{6}$?
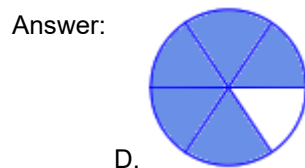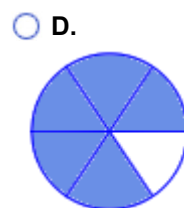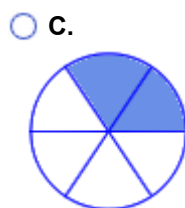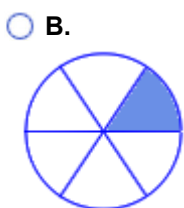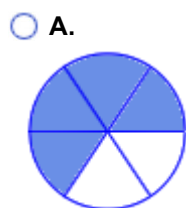
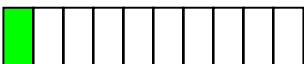○ **A.**   ○ **B.**   ○ **C.**   ○ **D.**

Answer:

D.
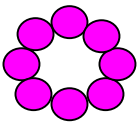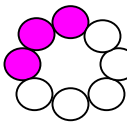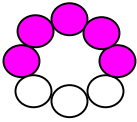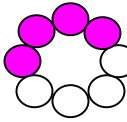
69.

Each of the objects shown to the right is divided into equal sections and part of each object is shaded. The shaded part is a fraction of the whole object.

Which object represents the fraction $\frac{4}{8}$?

Choose the correct answer below.

○ **A.**

○ **B.**

○ **C.**

○ **D.**

○ **E.**
   None of the above.

Answer:

D.
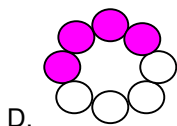
70.

Each of the figures shown to the right is divided into equal sections, and part of each figure is shaded. The shaded part is a fraction of the whole figure.

Which figure represents the fraction $\frac{10}{10}$?

Choose the correct answer below.

○ **A.**

○ **B.**

○ **C.**

○ **D.**

○ **E.**   None of the above.

Answer:

B.
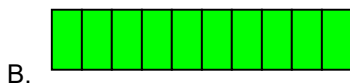
71.   In an American Sign Language (A.S.L) class of 29 students, 18 are hearing impaired. What fraction of the students are hearing impaired?

The fraction of the students that are hearing impaired is [   ] .

Answer: $\frac{18}{29}$

72. Of 69 cars making up a freight train, 52 are boxcars.

A. How many of the cars are *not* boxcars?
B. What fraction of the cars are *not* boxcars?

A. The number of cars that are *not* boxcars is ⬚ .

B. The fraction of the cars that are *not* boxcars is ⬚ .

Answers 17

$$\frac{17}{69}$$

---

73. The Atlantic hurricane season of this year rewrote the record books. There were 22 tropical storms, 13 of which turned into hurricanes. What fraction of this season's Atlantic tropical storms escalated to hurricanes?

The fraction of tropical storms which escalated to hurricanes is ⬚ .

Answer: $\dfrac{13}{22}$

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74. There are 31 days in the month of October. What fraction of the month does 13 days represent?

---

13 days represents ⬚ of the month of October.

Answer: $\dfrac{13}{31}$

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75. Represent the shaded part of the group of circles with
A. an improper fraction and
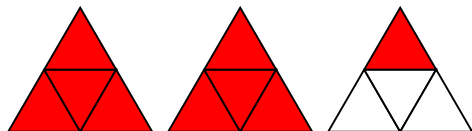**B.** a mixed number.
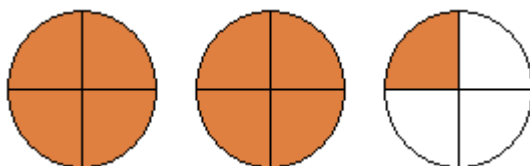
A. The improper fraction which represents the shaded area of the figure group is ⬚ .
B. The mixed number which represents the shaded area of the figure group is ⬚ .

Answers $\dfrac{9}{4}$

$2\dfrac{1}{4}$

---

76. Represent the shaded part of the group of triangles with
   A. an improper fraction and
   B. a mixed number.

A. The improper fraction that represents the shaded area of the figure group is [＿＿＿＿].

B. The mixed number that represents the shaded area of the figure group is [＿＿＿＿].

Answers $\dfrac{9}{4}$

        $2\dfrac{1}{4}$

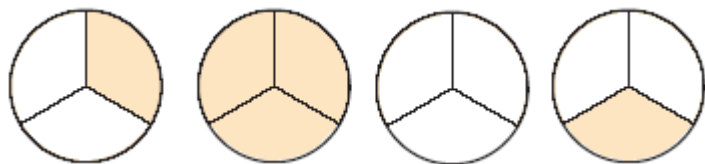77. Write the shaded area in the figure as **a)** an improper fraction and **b)** a mixed number.

a) The shaded area as an improper fraction is [＿＿＿＿].

b) The shaded area as a mixed number is [＿＿＿＿].

Answers $\dfrac{11}{6}$

        $1\dfrac{5}{6}$

78. Represent the shaded area in the figure group with
A. an improper fraction and
B. a mixed number.

A. The improper fraction is [＿＿＿＿＿]. (Type an improper fraction. Do not reduce.)

B. The mixed number is [＿＿＿＿＿]. (Type a mixed number. Do not reduce.)

Answers $\dfrac{5}{3}$

$1\dfrac{2}{3}$

79. Write the shaded area in the figure group as (a) a mixed number and (b) an improper fraction.

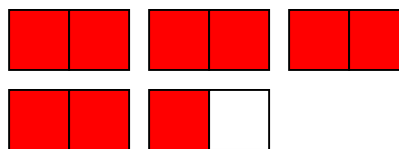**a.** Write the shaded area as a mixed number.

[＿＿＿＿＿] (Type a mixed number. Do not simplify.)

b. Write the shaded area as an improper fraction.

[＿＿＿＿＿] (Type an improper fraction. Do not simplify.)

Answers $1\dfrac{1}{4}$

$\dfrac{5}{4}$

80. Represent the shaded part of the group of figures with **(a)** an improper fraction and **(b)** a mixed number.

a. Write the shaded area as an improper fraction.

b. Write the shaded area as a mixed number.

Answers $\dfrac{9}{2}$

$4\dfrac{1}{2}$

81.

What fraction correctly represents the shaded part of the figure below?
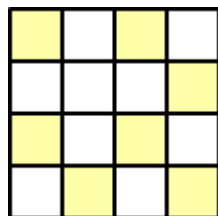
Choose the correct answer below.

○ **A.** $\dfrac{16}{7}$

○ **B.** $\dfrac{9}{16}$

○ **C.** $\dfrac{7}{16}$

○ **D.** $\dfrac{7}{9}$

Answer: C. $\dfrac{7}{16}$

---

82. Find the prime factorization of the following number. Write any repeated factors using exponents.

8

The prime factorization of 8 is ⎡⎤.

Answer: 2^3

---

83. Find the prime factorization of the number 15. Write any repeated factors using exponents.

The prime factorization is ⎡⎤.

Answer: 5 • 3

84. Find the prime factorization of the following number. Write any repeated factors using exponents.

     40

The prime factorization of 40 is [＿＿＿＿＿].

     Answer: $2^3 \cdot 5$

85.
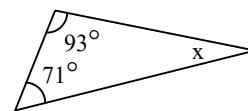
Find the measure of ∠x in the figure.

67°

x

66°
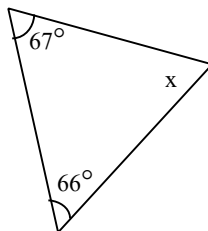
(Note: Figure is not drawn to scale.)

The measure of ∠x is [＿＿＿＿＿]°.

     Answer: 47

---

86. Find the measure of ∠x in the figure.

93°

71°

x

(Note: Figure is not drawn to scale.)

The measure of ∠x is [＿＿＿＿＿]°.

     Answer: 16

---

87. Find the measure of ∠x in the figure.

x

25 °
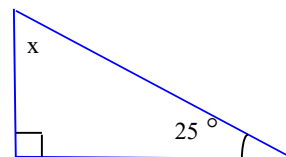
The measure of ∠x is [＿＿＿＿＿]°.

     Answer: 65

88. Identify the solid shown to the right.
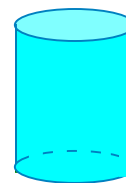
Choose the correct answer below.

○   cube
○   cylinder
○   pyramid
○   cone
○   sphere
○   rectangular solid

Answer: cylinder

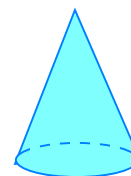89. Identify the solid shown to the right.
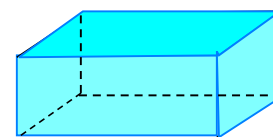
Choose the correct answer below.

○   cube
○   cone
○   sphere
○   cylinder
○   rectangular solid
○   pyramid

Answer: rectangular solid

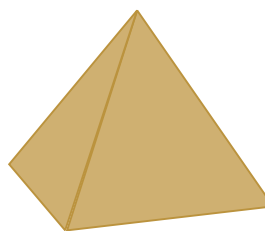90. Identify the solid shown to the right.

Choose the correct answer below.

- ○ sphere
- ○ cone
- ○ cylinder
- ○ pyramid
- ○ rectangular solid
- ○ cube

Answer: cone

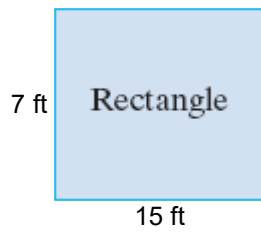91. Identify the basic shape of the item shown to the right.

The basic shape of the item shown is a (1) [　　　　　]

(1) ○ sphere.
   ○ rectangular solid.
   ○ cube.
   ○ pyramid.

Answer: (1) pyramid.

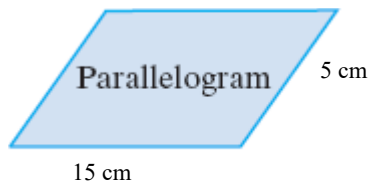92. Find the perimeter of the following figure.

7 ft　Rectangle

15 ft

Perimeter = [　　　　　] (1) [　　　　　]

(1) ○ ft
    ○ sq. ft

Answers 44

(1) ft

93. Find the perimeter of the following figure.

Parallelogram　5 cm

15 cm

Perimeter = [　　　　　] (1) [　　　　　]

(1) ○ cm
    ○ sq. cm

Answers 40

(1) cm

94. Find the perimeter of the following figure.

7 in.   9 in.
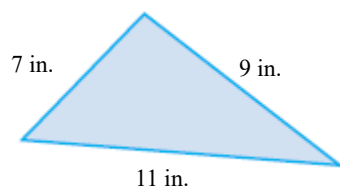
11 in.

The perimeter is [   ] (1) [   ]

(1) ○ in.
    ○ sq. in.

Answers 27

(1) in.

---

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

13 ft   11 ft

10 ft   11 ft

18 ft
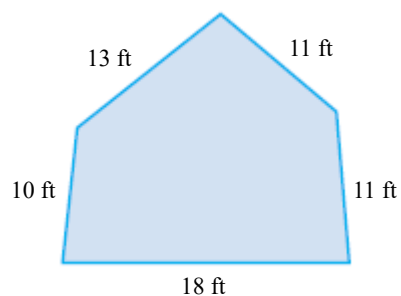
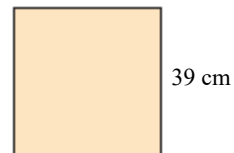Perimeter = [   ] (1) [   ]

(1) ○ ft.
    ○ sq. ft.

Answers 63

(1) ft.

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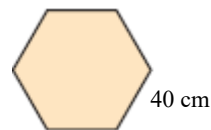

39 cm

The perimeter is [   ] (1) [   ]

(1) ○ centimeters.
    ○ square centimeters.

Answers 156

(1) centimeters.

97. Find the perimeter of the regular polygon shown to the right.
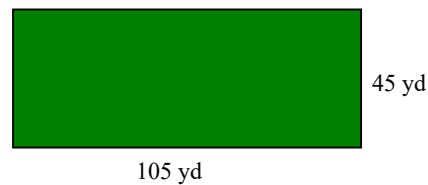
40 cm

The perimeter is [   ] (1) [   ]

(1) ○ square centimeters.
     ○ centimeters.

Answers 240

       (1) centimeters.

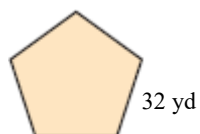98. If a playing field is 45 yards wide and 105 yards long, what is the perimeter?

45 yd

105 yd

Perimeter = [   ] (1) [   ]

(1) ○ yd
     ○ sq. yd

Answers 300

       (1) yd

---

99. Find the distance around the regular pentagon shown to the right.

32 yd

The distance around the figure is [   ] (1) [   ]

(1) ○ sq yd.
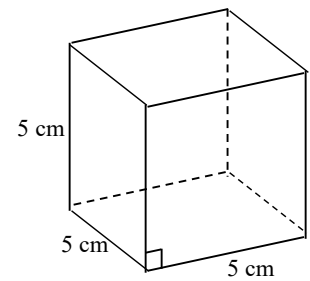   ○ yd.

Answers 160

       (1) yd.

100. Find the volume of the solid.

2 in.

4 in.   8 in.
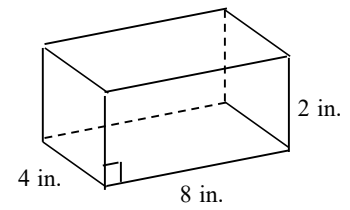
The volume of the solid is [ ] (1) [ ]
(Simplify your answer.)

(1) ◯ square inches.
    ◯ inches.
    ◯ cubic inches.

Answers 64

    (1) cubic inches.

---

101. Find the volume of the solid.

5 cm

5 cm   5 cm

The volume of the solid is [ ] (1) [ ]
(Simplify your answer.)

(1) ◯ square centimeters.
    ◯ centimeteres.
    ◯ cubic centimeters.

Answers 125

    (1) cubic centimeters.