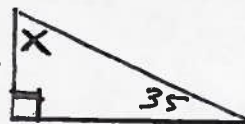


MATH 0305 Free Response

①
100HS

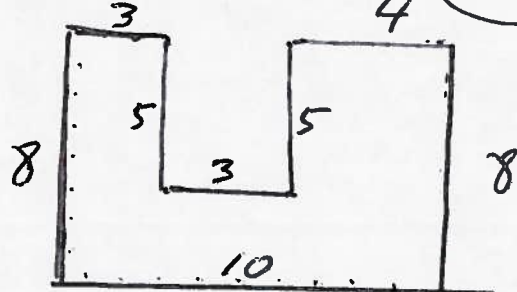
1. Simplify $\frac{2919}{36}$
2. LCM of 45 and 50
3. GCF of 45 and 50
4. Evaluate -3^2
5. Evaluate $(-4)^2$
6. Evaluate -2^3
7. Evaluate $(-2)^3$
8. Evaluate $|4-6|$
9. Evaluate $-|-2|$
10. Evaluate $-60 - (-2)$
11. Evaluate $\frac{70(7-2)+50}{5^2-5}$
12. Evaluate $-20 + 60 \div (-10)(-2)$
13. Solve $-2x+1=19$
14. Solve $4x+1=6x+21$
15. Simplify $-\frac{1}{2} + \left(-\frac{1}{4}\right) + \frac{1}{6}$
16. Simplify $-\frac{3}{5} \div \left(-\frac{27}{25}\right)$
17. Evaluate $\frac{2}{11}(440)$
18. Evaluate $\frac{1}{4} \cdot \frac{1}{4} + \frac{5}{16}$
19. Simplify $-2x+3y-9x-5y$
20. Simplify $2.5(x+1.5)+7.25x$
21. Evaluate for $x=15$. $y=2.25x+7.00$
22. Find 20% of \$4210.
23. Solve $\frac{2}{300} = \frac{8}{x}$
24. Simplify $\frac{\frac{1}{2} + \frac{1}{8}}{2}$
25. Solve $\frac{2}{9}x = 2000$
26. Solve $-\frac{3}{5}x = -\frac{9}{25}$
27. Triangle???
28. Round 9.71639 to the nearest hundredth.
29. Perimeter???



$X =$

29. Perimeter???

$P =$



$$\textcircled{1} \quad \frac{2919}{36}$$

$$\begin{array}{r} 81 \frac{3}{36} \text{ or } 81 \frac{1}{12} \\ 36 \overline{) 2919.0} \\ \underline{-(288)} \\ 39 \\ \underline{-(36)} \end{array}$$

$\textcircled{3}$ rem

E729

M0305

081015

$\textcircled{2}$ Lcm of 45 and 50

$$\text{LCM} = \textcircled{450}$$

$$\begin{array}{l} 3 \overline{) 45} \\ 3 \overline{) 15} \\ 5 \overline{) 5} \\ 1 \end{array} \quad \begin{array}{l} 2 \overline{) 50} \\ 5 \overline{) 25} \\ 5 \overline{) 5} \\ 1 \end{array}$$

$$45 = 3 \cdot 3 \cdot 5$$

$$50 = 2 \cdot 5 \cdot 5$$

$$\text{LCM} = 2 \cdot 3 \cdot 3 \cdot 5 \cdot 5$$

$$= \textcircled{450}$$

$\textcircled{3}$ GCF of 45 and 50

$$\text{GCF} = \textcircled{5}$$

$$\begin{array}{l} 3 \overline{) 45} \\ 3 \overline{) 15} \\ 5 \overline{) 5} \\ 1 \end{array} \quad \begin{array}{l} 2 \overline{) 50} \\ 5 \overline{) 25} \\ 5 \overline{) 5} \\ 1 \end{array}$$

$$45 = 3 \cdot 3 \cdot 5$$

$$50 = 2 \cdot 5 \cdot 5$$

$$\text{GCF} = 5$$

$$\textcircled{4} \quad -3^2 =$$

$$- (3)(3) =$$

$$- (9) =$$

$$\textcircled{-9 =}$$

5. $(-4)^2 =$

$$(-4)(-4) =$$

$$(16) =$$

$$16 =$$

6. $-2^3 =$

$$-(2)(2)(2) =$$

$$-(8) =$$

$$-8 =$$

7. $(-2)^3 =$

$$(-2)(-2)(-2) =$$

$$(4)(-2) =$$

$$-8 =$$

8. $|4 - 6| =$

$$|-2| =$$

$$(2) =$$

$$2 =$$

9. $-|-2| =$

$$-(2) =$$

$$-2 =$$

10. $-60 - (-2) =$

$$-60 + 2 =$$

$$-58 =$$



$$(11) \frac{70(7-2)+50}{5^2-5} =$$

$$\frac{70(5)+50}{(5)(5)-5} =$$

$$\frac{350+50}{25-5} =$$

$$\frac{400}{20} =$$

$$20 =$$

(4)

$$(12) -20 + 60 \div (-10)(-2) =$$

$$-20 - 6(-2) =$$

$$-20 + 12 =$$

$$-8 =$$

(13)

$$-2x + 1 = 19$$

$$-2x + \cancel{1} - \cancel{1} = 19 - 1$$

$$-2x = 18$$

$$\frac{-2x}{-2} = \frac{18}{-2}$$

$$x = -9$$

(14)

$$4x + 1 = 6x + 21$$

$$4x + \cancel{1} - \cancel{1} = 6x + 21 - 1$$

$$4x = 6x + 20$$

$$4x - 6x = 6x + 20 - 6x$$

$$-2x = 20$$

$$\frac{-2x}{-2} = \frac{20}{-2}$$

$$x = -10$$

$$(15) \quad -\frac{1}{2} + \left(-\frac{1}{4}\right) + \frac{1}{6} = \quad \text{LCD} = 12$$

$$-\frac{1}{2} - \frac{1}{4} + \frac{1}{6} =$$

$$-\frac{1}{2} \left(\frac{6}{6}\right) - \frac{1}{4} \left(\frac{3}{3}\right) + \frac{1}{6} \left(\frac{2}{2}\right) =$$

$$-\frac{6}{12} - \frac{3}{12} + \frac{2}{12} =$$

$$\frac{-6-3+2}{12} =$$

$$\frac{-9+2}{12} =$$

$$\frac{-7}{12} =$$

$$(16) \quad -\frac{3}{5} \div \left(-\frac{27}{25}\right) =$$

$$-\frac{3}{5} \cdot \frac{25}{-27} =$$

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

$$\frac{5}{9} =$$

$$(17)$$

$$\frac{2}{11} (440) =$$

$$\frac{2}{\cancel{11}} \left(\frac{\cancel{11}(40)}{1} \right)$$

$$2(40) =$$

$$80 =$$



$$(18) \quad \frac{1}{4} \cdot \frac{1}{4} + \frac{5}{16} =$$

$$\frac{1}{16} + \frac{5}{16} =$$

$$\frac{1+5}{16} =$$

$$\frac{6}{16} =$$

$$\frac{2(3)}{2(8)} =$$

$$\frac{3}{8} =$$

$$(19) \quad -2x + 3y - 9x - 5y =$$

$$-11x - 2y =$$

$$(20) \quad 2.5(x + 1.5) + 7.25x =$$

$$2.5x + 3.75 + 7.25x =$$

$$9.75x + 3.75 =$$

$$(21) \quad y = 2.25x + 7.00$$

$$x = 15$$

$$y = 2.25(15) + 7.00$$

$$y = 33.75 + 7.00$$

$$y = 40.75$$

(22) Find 20% of 4210.

$$.20(4210) =$$

$$842 =$$

(23)

$$\frac{2}{300} = \frac{8}{X} \quad \text{Cross multiply}$$

$$2(X) = 300(8)$$

$$2X = 2400$$

$$\frac{2X}{2} = \frac{2400}{2}$$

$$X = 1200$$

(24)

$$\frac{\frac{1}{2} + \frac{1}{8}}{2} =$$

$$LCD = 8$$

$$\frac{\left(\frac{1}{2} + \frac{1}{8}\right) \left(\frac{8}{1}\right)}{\left(\frac{2}{1}\right) \left(\frac{8}{1}\right)} =$$

$$\frac{\frac{8}{2} + \frac{8}{8}}{\frac{16}{1}} =$$

$$\frac{4+1}{16} =$$

$$\frac{5}{16} =$$



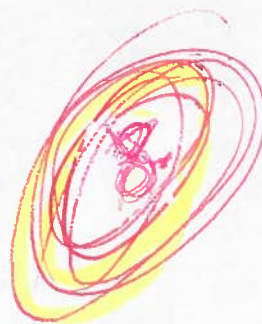
Average of
 $\frac{1}{2}$ and $\frac{1}{8}$

25. $\frac{2}{9}X = 2000$

$\frac{9}{2}(\frac{2}{9}X) = \frac{9}{2}(2000)$

$X = 9(1000)$

$X = 9000$



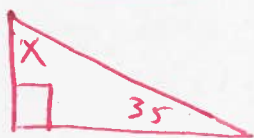
26. $-\frac{3X}{5} = -\frac{9}{25}$

$\frac{5}{-3}(-\frac{3X}{5}) = \frac{5}{-3}(-\frac{9}{25})$

$X = \frac{5}{-3}(\frac{(-3)(3)}{(5)(5)})$

$X = \frac{3}{5}$

27.



$X + 90 + 35 = 180$

$X + 125 = 180$

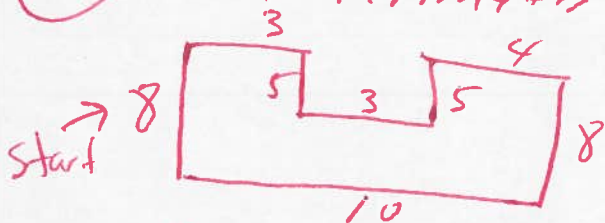
$X + 125 - 125 = 180 - 125$

$X = 55$

28. round to hundredth 9.71639

$\uparrow$
 $9.72 =$

29. Find Perimeter



$P = 8 + 3 + 5 + 3 + 5 + 4 + 8 + 10$

$= 46$