

Name _____

Due: Wednesday, September 9th

Show all work

This assignment will be graded.

For # 1 - 2 , Complete with $<$, $>$ or $=$

1. 4 $| -8 |$

2. $|3|$ $| -3 |$

For # 3 - 5 , evaluate each expression

3. $-6 + (-11)$

4. $2 - (-9)$

5. $-9 \cdot 2$

6. Evaluate the expression when $x = 5$, $y = -3$, and $z = -2$ (Substitute and Solve)

$$\frac{x - 5z}{y}$$

7. Write $-\frac{21}{16}$ as a decimal.

8. Write -0.122 as a fraction.

For # 9 - 12, Add, subtract, multiply or divide. Keep fractions in simplest form.

9. $-\frac{4}{9} + (-\frac{23}{18})$

The packet should be completed **without** a calculator

10. $\frac{17}{12} - \left(-\frac{1}{8}\right)$

11. $-4.4 \times (-6.02)$

12. $-1\frac{5}{6} \div 4\frac{1}{6}$

13. How many 2.25-pound containers can you make with 24.75 pounds of almonds?

For # 14 -16, simplify each expression.

(Combine like terms and use distributive property if you can)

14. $8x - 5 - 2x$

15. $(2r - 13) - (-6r + 4)$

16. $-2.5(2s - 5) - 3(4.5s - 5.2)$

17. Factor out the coefficient of the variable

$$3n - 24$$

For # 18 - 20 , solve each equation. (Solve for x)

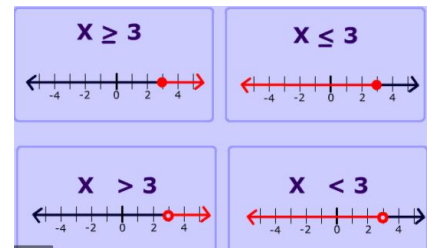
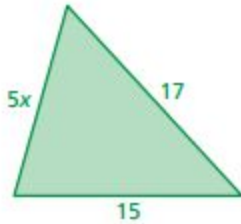
18. $7x = -3$

19. $-2(x + 1) = -2$

20. $\frac{2}{9}g = -8$

21. You lose 0.3 point for stepping out of bounds during a floor routine. Your final score is 9.124. Write and solve an equation to find your score before the penalty.

22. The perimeter of the triangle is 45. Find the value of x.



For #23 - 26, Solve each inequality and graph its solution.

23. $x - 4 > 6$

24. $-6z \geq 36$

25. $\frac{4}{7} - b \leq -\frac{1}{7}$

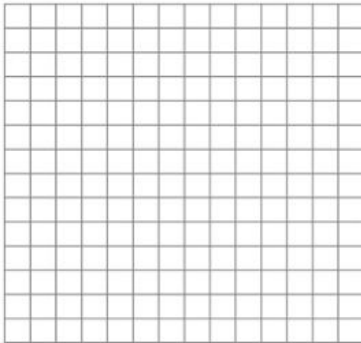
26. $-0.6 > -0.3(d + 6)$

27. You have \$2.50. Each gumball in a gumball machine costs \$0.25. Write and solve an inequality that represents the number of gumballs you can buy.

28. Find the unit rate: 84 miles in 12 days

29. Solve $\frac{17}{3} = \frac{y}{6}$

30. Graph the line that passes through (2, 9) and (4, 8) . Then find the slope of the line.



$$m = \frac{\text{rise}}{\text{run}} = \frac{y_2 - y_1}{x_2 - x_1}$$

31. Tell whether x and y show direct variation. Explain your reasoning

$$xy - 11 = 5$$

32. What percent of 28 is 21?

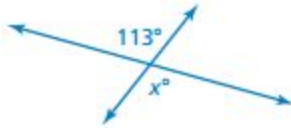
33. 64 is what percent of 40?

34. What number is 80% of 45?

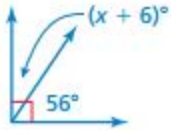
35. If the original price of a shirt is \$15 and it is on sale for 5% off. What is the sale price?

For # 36 - , find the value of x.

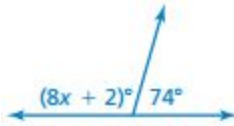
36.



37.



38.



39.

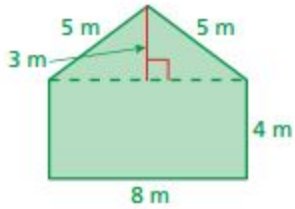


40. Find the circumference and the area of the circle. Leave answers in terms of π .

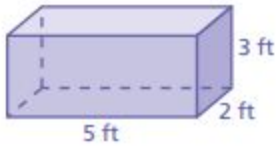


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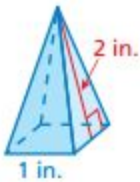
41. Find the perimeter and the area of the figure



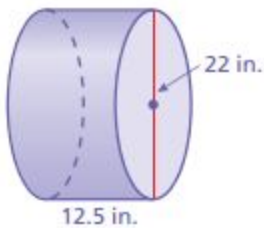
42. Find the surface area.



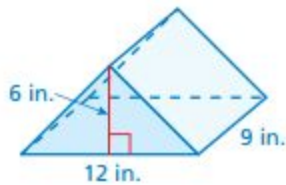
43. Find the surface area



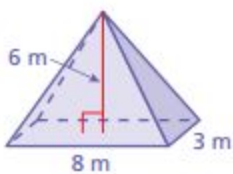
44. Find the surface area. Leave answers in terms of π .



45. Find the volume of the solid.



46. Find the volume of the solid.



H.W. Mountz Rising 8th grade Summer Packet 2020
(completed 7 Math)
The packet should be completed **without** a calculator