

## Summer Math

Please use *white lined paper* for your answers and your work. Please copy the original problem and *box in your answer* if you should show your work. If you are asked to choose an answer, please write your choice on the white lined paper. **Please take the time to write your numbers or letters neatly on the lines of the paper.**

1. Which ratio is greater? Show your work.

$$\frac{2}{5} \text{ or } \frac{3}{7}$$

2. A Store charges \$56 for 7 water bottles. Find the unit rate.
3. Luis drives 294 km in 7 hours. He drives at a constant speed. How many km does Luis drive per hour?
4. What percent of 20 is 7?
5. A soccer team wins 70% of their games. They play thirty matches in all. How many games did the team win?
6. Linda fills 36 glasses with lemonade. She uses 7.2 L of lemonade in all. How many mL of lemonade are there in each glass? (There are 1000 mL in a L.)
7. The temperature in City A is 7 degrees Fahrenheit below zero. The temperature in City B is 6 degrees Fahrenheit above zero. Use integers to express these two temperatures.
8. Which ordered pair represent points in Quadrant IV of the coordinate plane? Select all that apply.
- a. (3,4)
  - b. (2, -5)
  - c. (1, -6)
  - d. (-4, -4)
9. The table shows the average temperature of 4 different cities. Orders the cities from warmest to coldest.

City	Temperature (°F)
P	4.3
Q	-  8.1
R	2
S	- 8.9

10. Which statement best describes  $|-5|$  ?
- The distance of  $-5$  from zero on the number line.
  - The distance of  $+5$  from zero on the number line.
  - The distance between  $-5$  and  $+5$  on the number line.

11. Evaluate the expression using the order of operations.

$$9 \div 3^2 + 2 \times 4^2$$

12. A taxi driver uses the expression  $4 \div 2(t^2 - 3)$  to calculate his profit after  $t$  hours of work. What is the driver's profit after 5 hours of work?

13. Luke makes 140 sandwiches on a busy day at his shop. The price of each sandwich is  $p$  dollars. His total sandwich sales comes to \$840.

- a. Which equations represents Luke's sales?

1.  $140p = 840$

2.  $140 + p = 840$

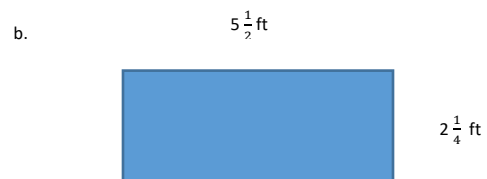
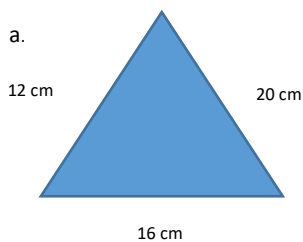
3.  $p \div 140 = 840$

- b. What is the price of each sandwich?

14. Write as a decimal and as a mixed number:

565%

15. Find the perimeter of each figure.



16. Write in standard form.

$$(5 \times 10^4) + (6 \times 10^1) + (7 \times 10^{-2})$$

17. Find the sales tax and the total cost the jeans.  
\$39.50 for the jeans and 6% sales tax

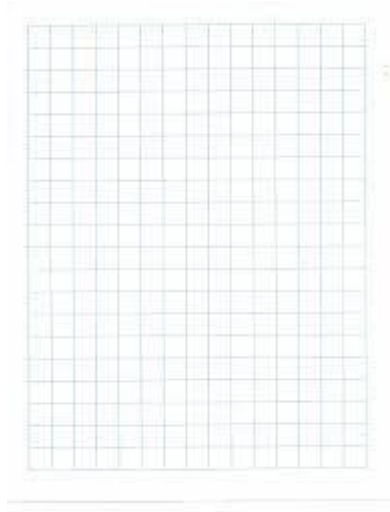
18. Solve the equation. Show the steps.

$$15 = d + 5.25 + 7.5$$

19. Solve the equation. Show the steps.

$$f + 8^2 = 3^2$$

- 20.

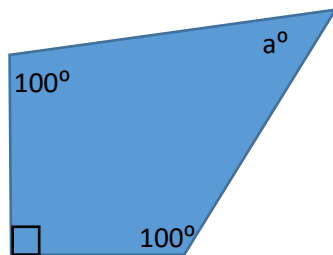


Use the graph grid on the left to place the following points on the coordinate plane. Label the points.

A (-3, -4)

B (0, -2)

21. Find the value of the variable in the polygon.

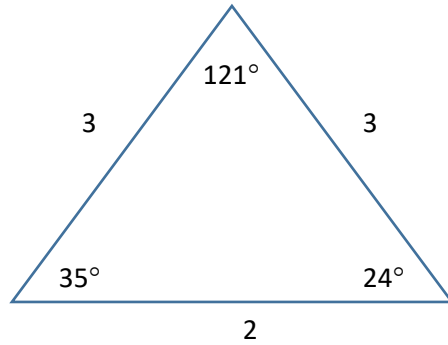


22. Find the mean, median, mode and range for the data.

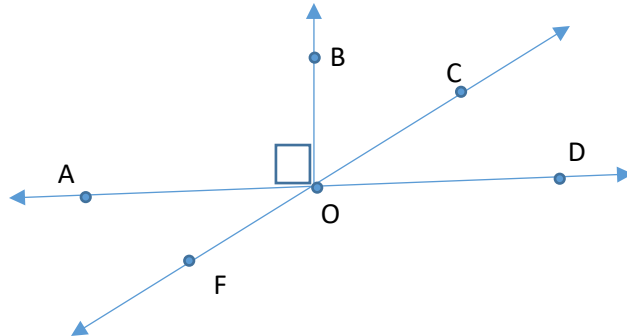
5, 6, 1, 10, 6, 3, 4

23. A leather sofa is marked 30% off. That is a savings of \$450 from the list price. What is the list price of the sofa? Show your work.

24. Name the triangle by its angles and its sides.



25. Name a pair of vertical angles. Don't forget symbols.



26. Use the diagram above to name a line. Use symbols.

27. Use the table to data from the table to complete the histogram.

Rainfall (cm)	Tally	Frequency (fraction)
0.0-0.5		
0.6 - 1.1		
1.2 - 1.7		
1.8 +		