Algebra I Summer Packet Part I

Name: _____ **Date:** _____

1. Simplify $8 \div 2 \cdot (3 - 7)$ using the correct order of operations.

2. The table shows the mass of sulfur for each of several different volumes. Determine the slope of the graph of the data to the nearest whole number.

Mass (g)	Volume (cm^3)
12.2	5.9
33.2	16.1
55.0	26.7
112.0	54.3

3. The high temperature for August 15 during the past 10 years is given in the table.

TEMPERATURE RECORD

Year	Temperature
2007	94° F
2008	82° F
2009	85° F
2010	82° F
2011	90° F
2012	87° F
2013	82° F
2014	89° F
2015	78° F
2016	87° F

What is the mode of these temperatures?

4. The side of a square is $7ab$. What is the perimeter?

5. Looking at the following list of used cars, if Mr. Linn wanted to buy a car for less than $10,000, what would be the range of the set of cars he could choose?

Camry	$9,000.00
Taurus	$6,500.00
Accord	$5,600.00
Jeep	$20,000.00
Explorer	$12,680.00
Prelude	$4,500.00
Malibu	$2,200.00

6. The Friday attendance at a local theater is shown for the last 7 weeks. What is the median Friday attendance for the 7-week period?

THEATER ATTENDANCE

Week	Attendance
1	101
2	79
3	170
4	150
5	92
6	85
7	79

7. Phoebe's grades for the last five weeks are shown in the table.

Phoebe's Grades	
Subject	*Grade*
band	98
English	85
history	80
math	92
science	85

What is the mean of her grades?

8. What is the sum of $-15 + 18$?

A. 33 B. 3 C. -3 D. -33

9. What is the product of $3(-16)$?

A. 48 B. 13 C. -13 D. -48

10. Which expression has a value of 18?

A. $[(3 \times 4) - (2 \times 5)] + 1$

B. $3 + 4 + [(2 \times 5) + 1]$

C. $3 + [(4 \times 2) + (5 \times 1)]$

D. $3 \times [(4 \times 2) - 5] - 1$

11. David's teacher asked him to solve the problem shown below.

$$(-125 + 175) + (-125 + 165) + 110$$

David's answer of 190 is incorrect. What is the correct answer?

A. 150 B. 160 C. 200 D. 210

12. What is the solution to the equation?

$$\frac{12(-3) + 4}{4} =$$

A. -36 B. -8 C. 3 D. 8

13. A car made a trip of 352 miles on 16.8 gallons of gasoline. Which is closest to the number of miles per gallon the car got on that trip?

A. 10 mpg B. 20 mpg

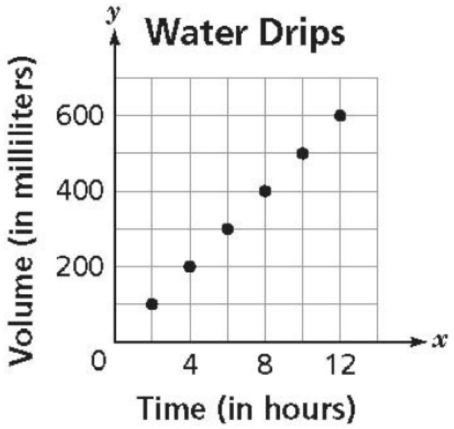
C. 30 mpg D. 40 mpg

14. Cory sold 6 baseball cards to a collector for a total of \$90. He sold each card for the same price. What is the unit rate for Cory's baseball cards?

A. \$6 per card B. \$15 per card

C. \$30 per card D. \$84 per card

15. Look at the graph.



If the water continues to drip at the same rate, how many milliliters of water will have dripped at 14 hours?

A. 600 B. 700 C. 800 D. 900

16. Susan wants to ride her bicycle from Franklin, Louisiana, to New Iberia, which is 21 miles away. She plans on completing the bike ride in 3 hours. At what average speed should she travel?

A. 6 miles per hour B. 7 miles per hour

C. 18 miles per hour D. 24 miles per hour

17. What is $\frac{2}{3}$ as a decimal number?

A. .33333... B. .22222...

C. .66666... D. .2323...

18. 0.48 is what equivalent to what fraction?

A. $\frac{12}{25}$ B. $4\frac{4}{5}$ C. $\frac{6}{125}$ D. $\frac{2}{5}$

19. $\frac{4}{100}$ is what percent?

A. 400% B. 40% C. 4% D. .4%

20. .89 is what percent?

A. .89% B. 8.9% C. 89% D. 890%