

Name _____

Summer Packet for Incoming 7th Grade Students

1. Henry is buying orange juice to make punch for a party. He can buy the juice in 32-oz cartons for \$2.56 each or 48-oz cartons for \$3.36 each. Which is the better value? Explain.

2. Select all the pairs of expressions that are equivalent.

A. $14d + 21$ and $7(2d + 3)$

B. $9(5r - 2)$ and $14r - 7$

C. $8(6q - 9)$ and $48q - 72$

D. $16 + 4w$ and $2(2w + 8)$

E. $32t + 16$ and $16(2 - t)$

3. Solve the division problems.

A. $494 \div 95 =$ _____

B. $136.8 \div 24 =$ _____

C. $96.9 \div 19 =$ _____

D. $43.2 \div 8 =$ _____

4. The table shows the relationship the choir director tries to maintain between the number of sopranos and the number of altos in the chorus. Complete the table using

the ratio given.

Chorus Members	
Sopranos	Altos
7	5
14	
21	
	20

5. Larry is a locavore, which means he tries to only eat food produced within 200 miles of his home. Which inequality represents the distance, d , from Larry's home of food that he does not eat?

- A. $d > 100$
- B. $d < 200$
- C. $d > 200$
- D. $d < 100$

6. Find the greatest common factor (GCF).

A. 16 and 30

B. 22 and 34

C. 26 and 38

7. Solve $1,288 \div 46$.

8. Compute the least common multiple (LCM) of each pair of numbers.

2 and 10: _____

3 and 12: _____

8 and 12: _____

4 and 10: _____

8 and 10: _____

9. Which equation has $x = 17$ as the solution?

A. $73 + x = 80$

B. $11 = x - 6$

C. $4x = 72$

D. $48 + x = 64$

10. Peter wants to buy a coat that costs \$87 at full price. The coat is now on sale for 40% off. How much money did Peter save on the coat?

11. Dan read 104 pages of his book. He has 68% of his book left to read. How many pages are in his book? Explain.

12. Kevin correctly answered 75% of 32 test questions. How many questions did Kevin answer correctly?

13. Sheila is biking at a constant speed. She travels 54 meters in 9 seconds. How long would it take Sheila to travel 90 meters at this speed?

14. Susan can buy 6 flower seed packets for \$2. If all the seed packets cost the same amount of money, how many packets can Susan buy for \$10?

- A.** 12 packets
- B.** 20 packets
- C.** 24 packets
- D.** 30 packets

15. Cary earned \$56 for 7 hours of babysitting. How much would Cary earn for 55 hours of babysitting?

16. At Brown Elementary School, 80% of all fifth graders ride the bus to school. If 124 fifth graders ride the bus to school, how many fifth graders are there at the school?

17. Mrs. Allan's car uses 8 gallons of gas for a 224-mile trip. Mrs. Owen's car uses 6 gallons of gas for a 210-mile trip. How many gallons of gas would each car use if both cars traveled 560 miles? Explain.

18. A store sells packs of 3 mini-pizzas for \$5.

Part A

Complete the ratio table to show the price for up to 15 mini-pizzas.

Mini-Pizzas		6		12	15
Price (\$)	5		15		

Part B

Plot the data from the table on the coordinate plane. Then draw a line to show the cost of more mini-pizzas.

Part C

How much would 25 mini-pizzas cost?