

# math

## 7<sup>th</sup> to 8<sup>th</sup> Grade Summer Packet 2018

Please complete this packet and bring it to turn in on the first day of school in September. Use a pencil, show all work, and record answers on the lines provided.

Extra copies are available on the Middle School's website or in the Middle School office.

**MATH  
ROCKS**

**Summer Practice**

**7<sup>th</sup> to 8<sup>th</sup> Summer Practice**

Tell whether the two fractions form a proportion.

1.  $\frac{3}{4}, \frac{16}{20}$                       2.  $\frac{5}{7}, \frac{30}{42}$                       3.  $\frac{4}{18}, \frac{6}{27}$

4. Use the ratio table to find the unit rate in dollars per ounce.

<b>Amount (ounces)</b>	12	16	20	24
<b>Cost (dollars)</b>	0.96	1.28	1.6	1.92

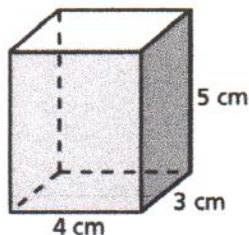
Order the numbers from least to greatest.

5.  $|-5|, 6, -6, -|4|, -2$                       6.  $\frac{15}{2}, -8.5, -\frac{42}{5}, 10.2$

Solve the inequality.

7.  $4x < 24$     8.  $x + 8 \geq 12$

9. What is the volume of the prism?



10. A map has a scale of 1 in. : 10 mi. On the map, the distance between two cities is 5 inches. What is the actual distance between the cities?

Simplify the expression.

11.  $-4 + 11$                       12.  $-6 - 9$                       13.  $-7(-8)$   
 14.  $60 \div (-4)$                       15.  $|-34|$                       16.  $| -(-41) |$   
 17.  $17(-14)$                       18.  $12 - (-19)$                       19.  $\frac{4}{15} + \frac{5}{9}$   
 20.  $-\frac{7}{8} \div \frac{3}{4}$                       21.  $\frac{13}{18} \cdot \frac{9}{25}$                       22.  $-\frac{7}{12} - \frac{1}{8}$   
 23.  $(0.6)^2$                       24.  $8.37(-5.3)$                       25.  $0.95 - 3.49$

**Answers**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. \_\_\_\_\_
12. \_\_\_\_\_
13. \_\_\_\_\_
14. \_\_\_\_\_
15. \_\_\_\_\_
16. \_\_\_\_\_
17. \_\_\_\_\_
18. \_\_\_\_\_
19. \_\_\_\_\_
20. \_\_\_\_\_
21. \_\_\_\_\_
22. \_\_\_\_\_
23. \_\_\_\_\_
24. \_\_\_\_\_
25. \_\_\_\_\_

**Summer Practice** **Summer Practice** (continued)

26. The length and the width of a rectangle are both doubled. What is the ratio of the area of the larger rectangle to the area of the smaller rectangle?

**Answers**

26. \_\_\_\_\_

27. \_\_\_\_\_

28. \_\_\_\_\_

29. \_\_\_\_\_

30. \_\_\_\_\_

31. \_\_\_\_\_

32. \_\_\_\_\_

33. \_\_\_\_\_

34. \_\_\_\_\_

35. \_\_\_\_\_

36. \_\_\_\_\_

37. \_\_\_\_\_

38. **See left.**

39. **See left.**

40. **See left.**

41. \_\_\_\_\_

42. \_\_\_\_\_

43. \_\_\_\_\_

44. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

45. **See left.**

46. \_\_\_\_\_

**Solve the equation.**

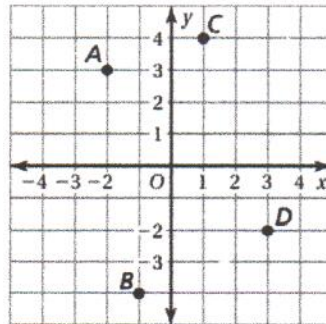
27.  $7 + x = -2$       28.  $8 - x = 13$       29.  $x - 11 = -5$

30.  $3x - 2 = -5$       31.  $8x + 5 = 21$       32.  $9 - 2x = 23$

33. Use the properties of equality to show that the equation  $6x + 3 = 27$  is equivalent to the equation  $2x = 8$ .

**Find the coordinates of the point.**

34. *A*                      35. *B*  
 36. *C*                      37. *D*



**Complete the statement using <, >, or =.**

38. 1 in. \_\_\_\_\_ 2.54 cm      39. 40 in. \_\_\_\_\_ 1 m      40. 7 L \_\_\_\_\_ 2 gal

**Write the fraction as a decimal.**

41.  $\frac{3}{4}$                       42.  $\frac{5}{16}$                       43.  $\frac{21}{4}$

44. In a class, the teacher asks each person wearing red to name his or her favorite color. Is this sample representative of the entire class? Explain.

45. The data below are the test scores of the students in a math class.

97, 76, 84, 82, 90, 95, 77, 79, 80, 82, 84, 77, 100, 78, 87

Create a stem-and-leaf plot to represent the data.

46. Each of the letters in the word MATHEMATICS are written on separate index cards. The cards are then placed in a hat. What is the probability of randomly drawing an index card with a vowel on it from the hat?