

Summer Assignment for students entering  
Advanced 7th grade in the Fall of 2019

Please complete each problem showing your work on a separate piece of paper and attach it in order to this page. Work should be numbered and in order with your name at the top of each page. This will be the first assignment for the 2019-2020 school year and will be due on the first day of school.

Name \_\_\_\_\_

**Pre-Course**

**Pre-Course Test**

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.  $|-5|, 6, -6, -|4|, -2$

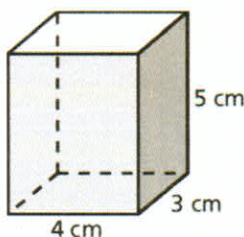
6.  $\frac{15}{2}, -8.5, -\frac{42}{5}, 10.2$

Solve the equation.

7.  $4x = 24$

8.  $x + 8 = 12$

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. \_\_\_\_\_

**Pre-Course**

**Pre-Course Test (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. \_\_\_\_\_

**Solve the equation.**

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

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

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

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

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

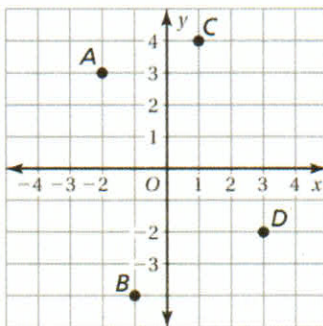
29. \_\_\_\_\_

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

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

**Find the coordinates of the point.**

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



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

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

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

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

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

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

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

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

38. See left.

39. See left.

40. See left.

**Write the fraction as a decimal.**

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

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

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

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.

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

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.

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

\_\_\_\_\_

\_\_\_\_\_

45. See left.

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

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?