Summer Assignment for students entering 8th 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 _____

Name _____ Date _____

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.

Amount (ounces)	12	16	20	24
Cost (dollars)	0.96	1.28	1.6	1.92

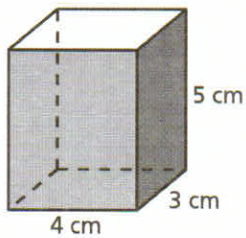
Order the numbers from least to greatest.

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. _____

Name _____ Date _____

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?

Solve the equation.

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

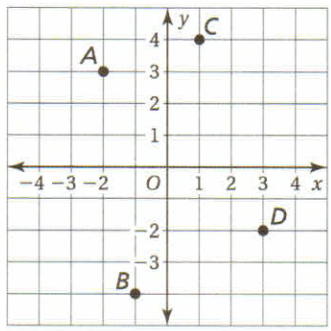
30. $3x - 2 = -5$ **31.** $8x + 5 = 21$ **32.** $9 - 2x = 23$

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?

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. _____