

Incoming 7th Grade Summer Math Work 2019- Pre-Algebra**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.

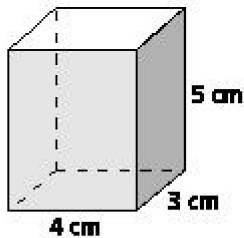
Amount (ounces)	12	16	20	24
Cost (dollars)	0.96	1.28	1.6	1.92

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?

Name: _____

ID: A

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. $0.95 - 3.49$

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.

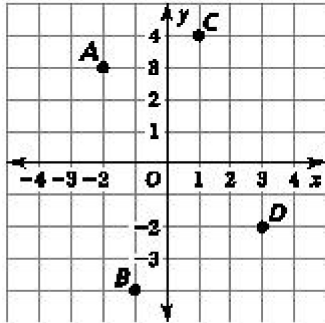
27. $7 + x = -2$

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. $\frac{21}{4}$

Name: _____

ID: A

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?