Incoming 6th Grade Math Summer Assignment

- The purpose of this assignment is to help you practice the skills that will be necessary for your success in the 6th grade, and should reflect the work you completed during 5th grade.

- This summer assignment will be collected when you return to school in September.

- It is your responsibility to visit Khan Academy online for tutorials if you need clarification on any of the math skills.

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. Find the factors of the number.
27
a. 1, 27
b. 3, 9
c. 1, 3, 9, 27
d. 3, 9, 27

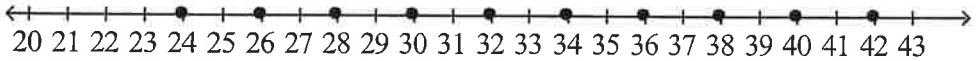
____ 2. Find the first five multiples of the number.
6
a. 6, 12, 18, 24, 30
b. 6, 12, 18, 30, 36
c. 12, 18, 24, 30, 36
d. 6, 12, 18, 22, 30

____ 3. Find the first five multiples of the number.
9
a. 18, 27, 36, 45, 54
b. 9, 18, 27, 36, 45
c. 9, 18, 27, 45, 54
d. 9, 18, 24, 36, 45

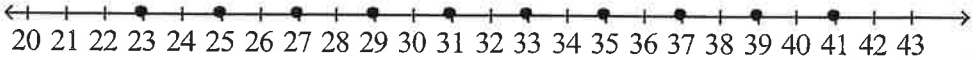
____ 4. Identify all of the prime numbers in the set of numbers.
4, 7, 15, 19, 24, 27
a. 7, 15, 19, 27
b. 7, 19
c. 7, 19, 27
d. 7

____ 5. Use the order of operations to simplify the expression.
$(6 + 18) \div 3 \times 2$
a. 4
b. 16
c. 18
d. 24

____ 6. Draw a horizontal number line to represent the set of even numbers from 22 to 42.
a.



b.



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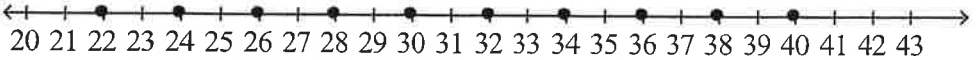

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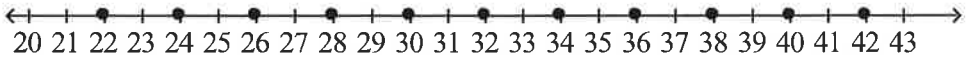
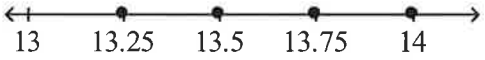


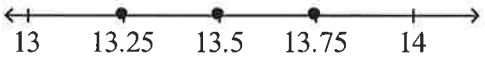
____ 7. Draw a horizontal number line to represent the set of decimals between 13 and 14 with an interval of 0.25 between each pair of decimals.

a.

b.



c.



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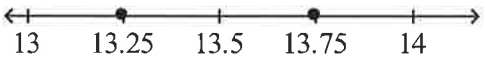
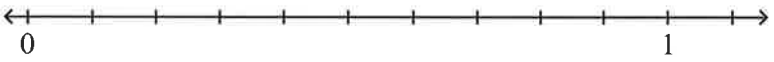


____ 8. Which of the following statements is true? Use the number to help you.



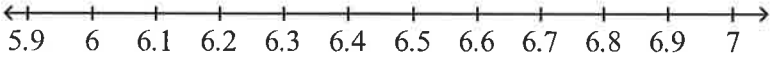
a. $\frac{1}{3} > \frac{3}{5}$

b. $\frac{1}{8} < \frac{2}{3}$

c. $\frac{3}{4} > \frac{5}{6}$

d. $\frac{5}{8} < \frac{2}{7}$

____ 9. Which of the following statements is true? Use the number to help you.



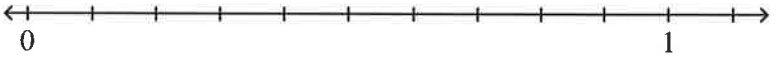
a. $6.09 > 6.90$

b. $6.11 < 6.04$

c. $6.77 > 6.23$

d. $6.64 > 6.82$

____ 10. Which of the following statements is true? Use the number to help you.



a. $\frac{1}{3} > 0.55$

b. $\frac{2}{5} < 0.15$

c. $\frac{3}{5} < 0.82$

d. $\frac{3}{8} > 0.22$

____ 11. Add $7.21 + 2.6$.

a. 7.27

b. 7.81

c. 9.27

d. 9.81

____ 12. Subtract $6.4 - 3.82$.

a. 2.22

b. 2.58

c. 3.42

d. 3.58

____ 13. Write the improper fraction as a mixed number in simplest form.

$\frac{39}{8}$

a. $4\frac{1}{8}$
c. $4\frac{7}{8}$
b. $4\frac{6}{8}$
d. $4\frac{3}{4}$

____ 14. Write the mixed number as an improper fraction.

$4\frac{5}{7}$

a. $\frac{16}{7}$
c. $\frac{33}{7}$
b. $\frac{28}{7}$
d. $\frac{55}{7}$

____ 15. Find the product in simplest form.

$\frac{5}{6} \times \frac{7}{8}$

a. $\frac{35}{48}$
c. $\frac{1}{4}$
b. $\frac{12}{14}$
d. $\frac{12}{48}$

____ 16. Which fraction is **not** equivalent to $\frac{24}{36}$ using division?

a. $\frac{12}{18}$
c. $\frac{2}{3}$
b. $\frac{4}{6}$
d. $\frac{20}{32}$

____ 17. Which value completes the pair of equivalent fractions?

$\frac{14}{15} = \frac{?}{90}$

a. 84
c. 112
b. 98
d. 126

____ 18. What is the fraction written in simplest form?

$\frac{48}{72}$

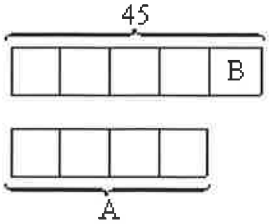
a. $\frac{8}{12}$
c. $\frac{6}{9}$
b. $\frac{4}{6}$
d. $\frac{2}{3}$

____ 19. Find the unknown measurement.

3 gallons = ? pints

a. 6
c. 18
b. 12
d. 24

____ 20. Find the values of A and B.



a. A = 36; B = 9
b. A = 27; B = 9
c. A = 20; B = 5
d. A = 36; B = 5

____ 21. Find the product. Express the product in simplest form.

$3 \times 6\frac{5}{7}$

a. $9\frac{5}{7}$
b. $18\frac{5}{7}$
c. $20\frac{1}{7}$
d. $21\frac{1}{7}$

____ 22. If 8 units represents 24 feet, find the value of 48 units.

a. 144
b. 64
c. 66
d. 16

____ 23. Write the ratio in simplest form.
36 in. : 324 in.

a. 3 in. : 108 in.
b. 1 in. : 9 in.
c. 4 in. : 36 in.
d. 1 in. : 18 in.

____ 24. Find two ratios equivalent to the given ratio.
5 : 7

a. 10 : 14 and 20 : 35
b. 25 : 35 and 30 : 42
c. 10 : 14 and 20 : 21
d. 30 : 42 and 35 : 56

____ 25. Find two ratios equivalent to the given ratio.
6 : 5

a. 18 : 15 and 42 : 45
b. 18 : 20 and 36 : 30
c. 24 : 20 and 36 : 35
d. 12 : 10 and 48 : 40

____ 26. Find the missing numerator and denominator.

$\frac{5}{7} = \frac{\square}{21} = \frac{25}{\square}$

a. 10; 35
b. 20; 35
c. 15; 40
d. 15; 35

____ 27. Find the missing numerator and denominator.

$\frac{7}{12} = \frac{28}{\square} = \frac{\square}{84}$

a. 36; 49
b. 48; 56
c. 48; 49
d. 36; 42

____ 28. Write the fraction in simplest form.

$\frac{16}{48}$

a. $\frac{8}{24}$
c. $\frac{1}{4}$
b. $\frac{4}{12}$
d. $\frac{1}{3}$

____ 29. Find the product. Express your answer in simplest form.

$\frac{12}{20} \times 35$

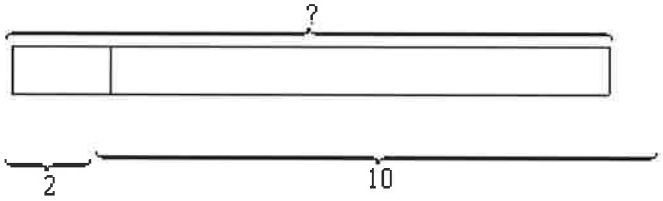
a. 10
c. 22
b. 21
d. 27

____ 30. Find the product. Express your answer in simplest form.

$\frac{5}{16} \times 36$

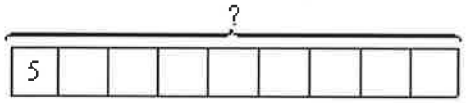
a. $3\frac{1}{2}$
c. $11\frac{1}{4}$
b. $10\frac{5}{4}$
d. $11\frac{3}{4}$

____ 31. Which operation can be represented by this bar model?



a. $2 + 10$
c. $10 \div 2$
b. $10 - 2$
d. 2×10

____ 32. Which operation can be represented by this bar model?



a. $5 + 9$
c. $9 \div 5$
b. $9 - 5$
d. 5×9

____ 33. What are the common factors of the pair of numbers?
40 and 48

a. 1, 2, and 4
c. 1, 2, and 8
b. 1, 2, 4, and 6
d. 1, 2, 4 and 8

____ 34. Complete the statement.
The _____ of 8 and 9 is 8×9.

a. quotient
c. difference
b. sum
d. product

____ 35. Complete the statement.
The _____ of 16 and 4 is $16 - 4$.

a. quotient
b. sum
c. difference
d. product

____ 36. Which number is less than $14 - 6$?

a. 7
b. 8
c. 20
d. 146

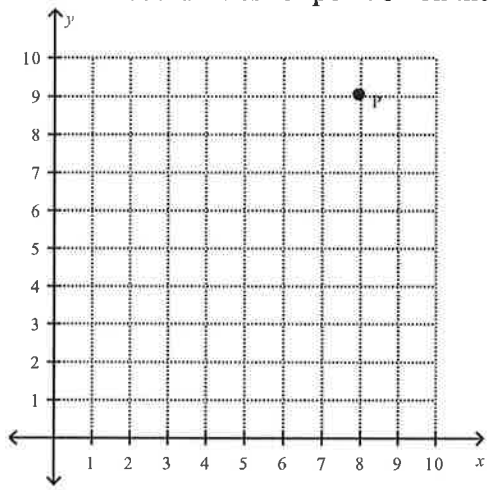
____ 37. Which statement is true?

a. $7 \times 8 > 35 + 21$
b. $7 \times 8 < 35 + 21$
c. $8 \times 7 > 21 + 35$
d. $8 \times 7 = 35 + 21$

____ 38. Which inequality symbol makes this comparison true?
$4 \times 25 \bigcirc 100 \div 4$

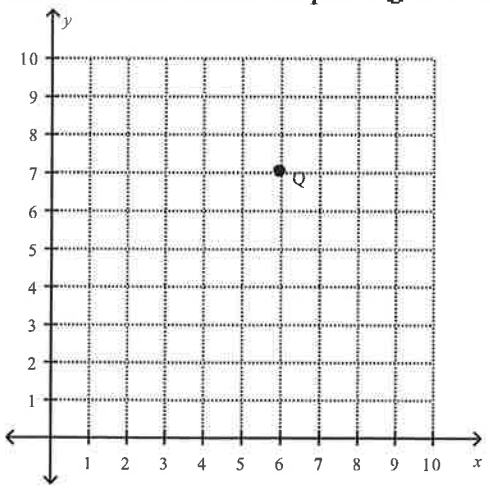
a. +
b. <
c. =
d. >

____ 39. Name the coordinates for point P on the coordinate plane.



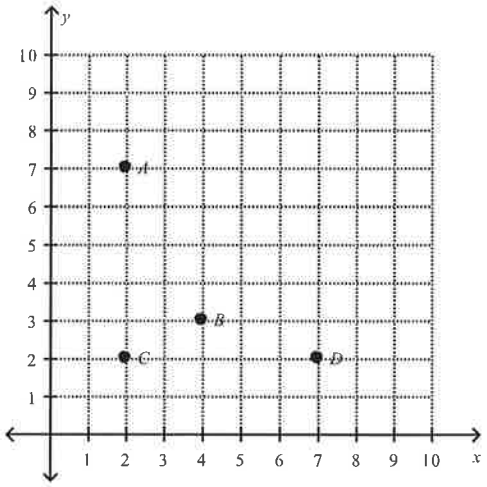
a. (8, 9)
b. (8, 8)
c. (9, 9)
d. (7, 9)

____ 40. Name the coordinates for point Q on the coordinate plane.



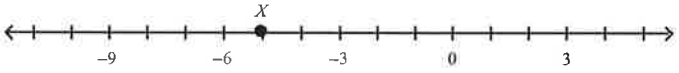
a. (7, 6)
b. (6, 6)
c. (6, 7)
d. (7, 7)

____ 41. Which point is plotted at $(7, 2)$?



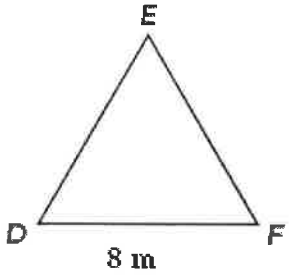
a. A
b. B
c. C
d. D

____ 42. Name the number that Point X represents.



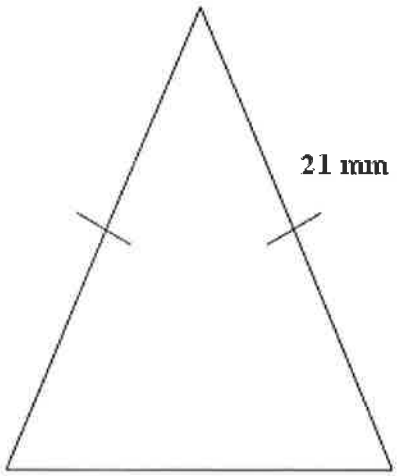
a. 5
b. 0
c. −5
d. −6

____ 43. Find the perimeter of the equilateral triangle *DEF*.



a. 4 m
b. 8 m
c. 24 m
d. 32 m

____ 44. Find the perimeter of the isosceles triangle below.



a. 50 mm
b. 54 mm
c. 64 mm
d. 63 mm

____ 45. The length of a rectangle is 13 meters and its width is 8 meters. Find the area of the rectangle.
a. $21\ m^2$
b. $42\ m^2$
c. $84\ m^2$
d. $104\ m^2$

____ 46. Add. $7.86 + 0.785$
a. 7.075
b. 7.545
c. 8.585
d. 8.645

____ 47. Subtract. $7.124 - 0.986$
a. 6.138
b. 7.862
c. 7.938
d. 8.1110

____ 48. Multiply. 6.45×3
a. 1.935
b. 19.35
c. 193.5
d. 1935

____ 49. Divide. $2.79 \div 3$
a. 0.093
b. 0.93
c. 9.3
d. 93

____ 50. Round 6.82 the nearest whole number.
a. 5
b. 6
c. 7
d. 8