

Turn On to Number (5 - 6)

Name _____

Read each problem carefully. Answer as many as you can. Write answers clearly. You may write on this test. You may not use a calculator.

1. Circle whether each number is “prime” or “composite.”

a) 3 prime composite

b) 10 prime composite

c) 43 prime composite

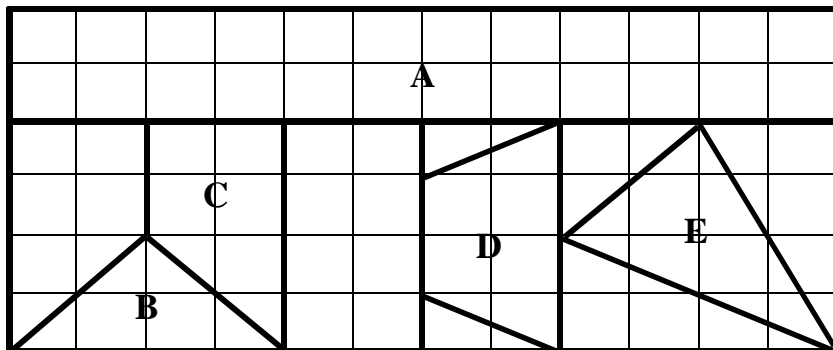
2. Write the prime factorization of 360.

3. Find GCF (greatest common factor) of 72, 96, and 108.

4. $\frac{2}{3} \times \frac{1}{5} =$ _____

5. $\frac{7}{8} \div \frac{1}{4} =$ _____

6. For each part of question 6, use the diagram on the grid below. (Note that the ends of all the segments forming the polygons are located at the intersections of the grid.) Reduce your answer to simplest form.



If the rectangle has a total area value of 1 unit, then:

a) What is the fractional value of the area of polygon A? _____

b) Explain how you got the answer.

c) What is the fractional value of the area of polygon B? _____

d) Which two polygons have the same area? _____

7. Circle all ratios below that are equivalent to $\frac{2}{6}$.

6 to 2 $\frac{2}{2}$ $\frac{1}{3}$ 4:8 $\frac{4}{12}$ $\frac{10}{30}$

8. a) Is the ratio $\frac{4}{5}$ equivalent to the ratio $\frac{8}{9}$? YES NO

b) Tell how you know your answer is correct.

9. a) Market A sells a six-pack of 12oz. soft drinks for \$3.00. Market B sells 18 cans of 12oz. soft drinks for \$12.00. Which market has the better buy?

Market A

Market B

- b) Explain how you decided on your answer.

10. Terry and Fran sell homemade lemonade (made of lemon juice and icy water) for the math club at their school. For every cup of lemon juice they need 3 cups of water. How much lemon juice is needed for $\frac{1}{2}$ gallon of lemonade? There are 16 cups in a gallon.

11. David has $\frac{2}{3}$ of his videos in a box. If one video equals $\frac{1}{12}$ of his collection, how many videos does he have in the box?

12. Five-sixths of a pepperoni pizza was left in a refrigerator. Mary ate $\frac{2}{5}$ of the leftovers. What fraction of the whole pizza did she eat?

13. Write each decimal as a fraction in simplest form:

a) .72 _____ b) .48 _____

14. Put the following fractions in order from least to greatest:

$$-\frac{1}{2} \quad .45 \quad \frac{5}{6} \quad -.7 \quad \frac{2}{3} \quad \frac{5}{8}$$

15. Fill in a symbol ($<$, $>$, $=$) to make each statement true.

a) 3.15 \bigcirc $3\frac{2}{5}$ b) $1\frac{1}{3}$ \bigcirc $-3\frac{2}{5}$

16. Write each fraction as a decimal and a percent:

Fraction	Decimal	Percent
$\frac{3}{5}$	a)	b)
$\frac{3}{10}$	c)	d)
$\frac{38}{100}$	e)	f)

17. Find 35% of 40.

18. Alicia went to lunch with Amy. Their lunch cost \$22.00. They want to leave a 15% tip. How much money should they leave?

19. What is the sales price of a shirt that is on sale for 25% off of the original price of \$18.00?
