Name: \_\_\_\_\_\_ Period: \_\_\_\_\_

25″

## 1. Perimeter of the Triangle 12" 8" 6" 2. Area of the Triangle 20" 3. Perimeter of the Parallelogram 12" 15″ 4. Area of the Parallelogram

## Simplify:

- 5.  $\frac{2}{7} + \frac{3}{4} =$
- 6.  $\frac{2}{7} \frac{3}{4} =$
- 7.  $\frac{2}{7} \cdot \frac{3}{4} =$
- 8.  $\frac{2}{7} \div \frac{3}{4} =$

## Order of Operations.

- $3(8-4) + 5^2 (2+3)$ 9.
- *10.* -6 -4(3 2) +6<sup>2</sup>

Write the Reciprocal:

- 11.  $\frac{14}{16}$
- *12.* 7
- 13.  $2\frac{4}{7}$

14. North Dakota has a very low population density. It only has 778,382 people in 70,762 square miles. What is the <u>unit</u> rate of density in terms of people per square mile?

*15.* Write the preferred algebraic expression for the <u>Area</u> of this shape.

*16.* Write an algebraic expression for the P<u>erimeter</u> of this shape.



17. Calculate <u>Perimeter</u> if x = 6 inches for this shape.

18. Simplify the expression.  $\mathbf{x} - \mathbf{8} + \mathbf{x} - \mathbf{4} - \mathbf{3x}^2 + \mathbf{x}^2 + \mathbf{3}$ 

*19.* Jasmine's Epicenter bill totaled \$56. She used a 35% off discount coupon. How much did she have to pay Epicenter?

20. Use the <u>Distributive Property</u> to simplify the expression. -7(3x - 5)

*21.* A jar contains 11 yellow, 5 orange, and 4 green tennis balls. If Mike draws a tennis ball at random out of the jar, what is the probability that he drew either a yellow or an orange tennis ball? Show your answer in fraction & percent.

22. A scalene triangle has three unequal side lengths. The medium-length side is 5 cm longer than the shortest side. The longest side is three times as long as the shortest side. The total perimeter is 30 cm. What are the lengths of the sides of the triangle? MUST SHOW all 5D steps.