

**Geometry**  
**WS Similar Polygons & Ratios**

Name \_\_\_\_\_  
Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve for X:**

1.  $\frac{2}{3} = \frac{x+6}{15}$

2.  $\frac{4}{10} = \frac{18}{x-2}$

3.  $\frac{x+4}{20} = \frac{6}{8}$

4.  $\frac{5}{2} = \frac{40}{x-3}$

Reduce each of the following extended ratios.

5.  $10:12:20$

6.  $100:300:500$

7.  $25:40:60$

8.  $15:21:33$

9. The cost of a hot dog is \$1.25, the cost of a hamburger is \$3.25. What is the ratio of the cost of a dog to the cost of a burger?

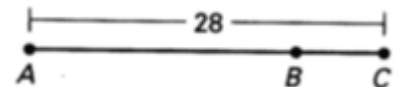
10. In 2001 the Chicago Bears won 12 games, lost 4 games (and had zero ties)

A) What is the ratio of Wins to Losses?

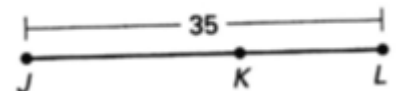
B) What is the ratio of Wins to games played?

C) What is the ratio of losses to games played?

11. In the diagram, the ratio of  $AB:BC$  is  $3:1$ . If  $AC = 28$ , find  $AB$  and  $BC$



12. In the diagram,  $JK:KL$  is  $3:2$ , and  $JL = 35$ . Find  $JK$  and  $KL$ .



13. The lengths of the sides of a triangle are in the extended ratio  $2:3:4$ . The perimeter is 135. What are the 3 lengths of the triangle?