**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Term 3 Review Homework Day 1**

1. There are 15 plums and 9 apples in a fruit bowl. What is the ratio of apples to plums?

 **A** 3:5 **B** 3:8 **C** 5:3 **D** 8:3

2. The scale drawing of a porch is 8 inches wide by 12 inches long. If the actual porch is 12 feet wide, what is the length of the porch?

 **F** 8 ft **G** 10 ft **H** 16 ft **J** 18 ft

3. The ratio of goats to sheep at a university research farm is 4:7. The number of sheep at the farm is 28. What is the number of goats?

A. 20 B. 16 C. 49 D. 21

4. Find the value of *x*.

**A.** $3.0$ **B.** $4.75$ **C.** $5.25 $**D.** $6.0 $**E.** $9.0$

5. The three sides of a triangle are in the ratio 2:5:13. If the shortest side is 4 meters long. Find the value of the other two sides.

6. ⊿ABC ~ ⊿LMN, AB = 18, BC = 12, LN = 9, and LM = 6. What is the scale factor of ⊿ABC to ⊿LMN?

$$ A. \frac{9}{2} B. \frac{3}{2} C. \frac{3}{1} D. \frac{2}{1} E. \frac{1}{2}$$

7. **.** ⊿ABC ~ ⊿DEF. Find the value of x.

8. The figure shows two right angles. The length of $\overbar{AE}$ is *x* and the length of $\overbar{DE}$ is 24. Solve for *x*.

1. 16.0
2. 17.6
3. 9.6
4. 12.0
5. 24.0

9. Which postulate or theorem would correctly prove the two triangles similar?



10. To find the height of a very tall pine tree, you place a mirror on the ground and stand where you can see the top of the pine tree. How tall is the tree?

11. $\overbar{BD}$ is a midsegment of ⊿AEC. Find the length of $\overbar{BD}$.

A. 2 B. 10 C. 12 D. 5 E. 6

12. $\overleftrightarrow{JK}$ and $\overleftrightarrow{RS}$ are parallel. Which of the following statements is true?



1. $\begin{matrix}QR\\\overline{QJ}\end{matrix}=\begin{matrix}QS\\\overline{QK}\end{matrix}$
2. $\begin{matrix}QR\\\overline{KS}\end{matrix}=\begin{matrix}QS\\\overline{RJ}\end{matrix}$
3. $\begin{matrix}KR\\\overline{JR}\end{matrix}=\begin{matrix}JS\\\overline{KS}\end{matrix}$
4. $\begin{matrix}JR\\\overline{QJ}\end{matrix}=\begin{matrix}KS\\\overline{RS}\end{matrix}$
5. $\begin{matrix}JK\\\overline{RS}\end{matrix}=\begin{matrix}QK\\\overline{SK}\end{matrix}$