Chapter 5: Similarity

Lesson 5-1: Using Proportions

Classwork

Name Date Period ____

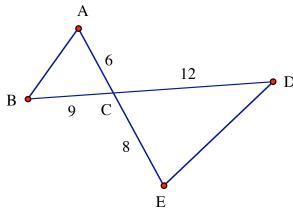
Express the following as a ratio in simplest terms.

1.
$$\frac{6}{24}$$

2.
$$\frac{9}{12}$$

3.
$$\frac{9}{51}$$

4.
$$\frac{1000}{2500}$$



For questions 5 - 10 refer to the above diagram.

5. $\frac{AC}{CE}$ 6. $\frac{CE}{AE}$ 7. $\frac{AC}{AE}$ 8. $\frac{CD}{BC}$ 9. $\frac{BD}{CD}$ 10. $\frac{BD}{AE}$

5.
$$\frac{AC}{CE}$$

6.
$$\frac{CE}{AE}$$

7.
$$\frac{AC}{AE}$$

8.
$$\frac{CD}{BC}$$

9.
$$\frac{BD}{CD}$$

10.
$$\frac{BD}{AE}$$

Solve the following proportions.

11.
$$\frac{16}{x} = \frac{4}{3}$$

12.
$$\frac{7x}{5} = \frac{42}{3}$$

13.
$$\frac{5}{8} = \frac{3x}{4}$$

11.
$$\frac{16}{x} = \frac{4}{3}$$
 12. $\frac{7x}{5} = \frac{42}{3}$ 13. $\frac{5}{8} = \frac{3x}{4}$ 14. $\frac{x+2}{4} = \frac{9}{2}$

15.
$$\frac{x}{3} = \frac{x+2}{5}$$

16.
$$\frac{x-5}{x} = \frac{3}{4}$$

15.
$$\frac{x}{3} = \frac{x+2}{5}$$
 16. $\frac{x-5}{x} = \frac{3}{4}$ 17. $\frac{x-1}{x+3} = \frac{3}{5}$

18.
$$\frac{2x-5}{4} = \frac{4x-7}{4}$$

19.
$$\frac{10-x}{5} = \frac{7-x}{2}$$

18.
$$\frac{2x-5}{4} = \frac{4x-7}{4}$$
 19. $\frac{10-x}{5} = \frac{7-x}{2}$ 20. $\frac{12}{4x+9} = \frac{18}{5x-4}$