Name _____ **Hour** _____

Use the given information to determine whether $\overline{BD} \parallel \overline{AE}$.

1.

2.

3.

Find the value of x.

4.

5.

6.

7.

8.

9.
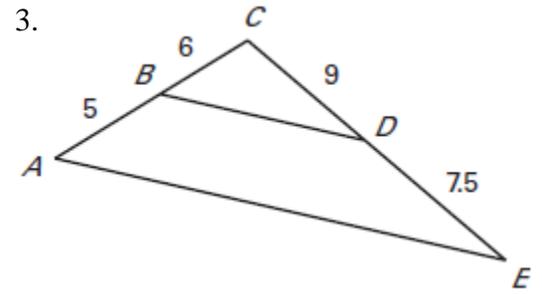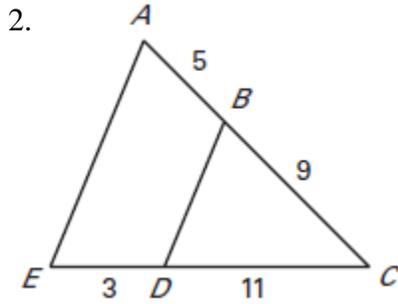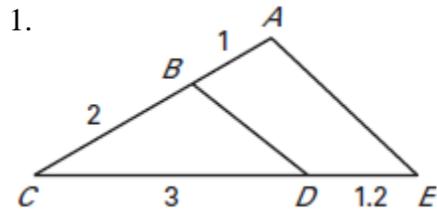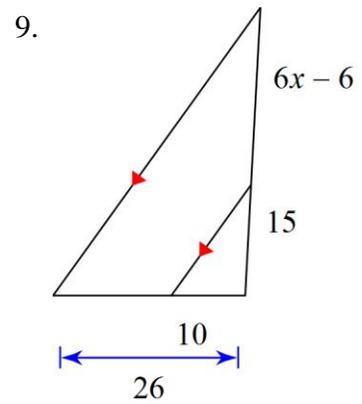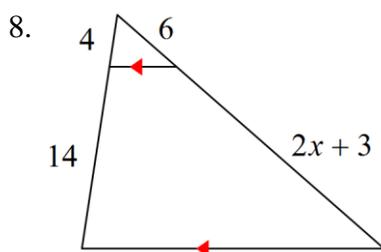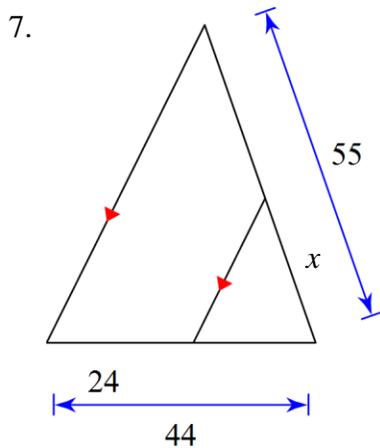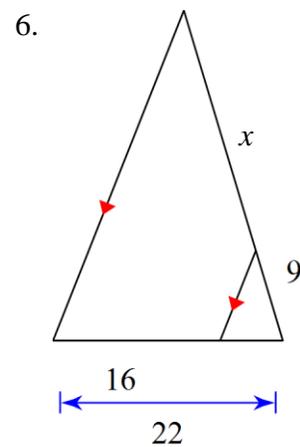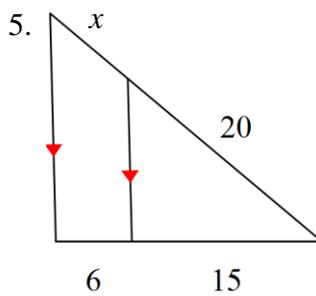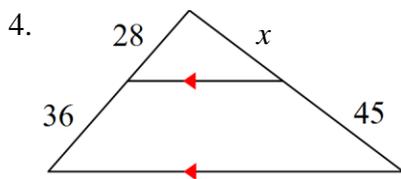
Use the figure to complete the proportion.

10. $\dfrac{AF}{CG} = \dfrac{EB}{\rule{1.5cm}{0.4pt}}$

11. $\dfrac{GB}{BE} = \dfrac{\rule{1.5cm}{0.4pt}}{FA}$

12. $\dfrac{CD}{FB} = \dfrac{GD}{\rule{1.5cm}{0.4pt}}$

13. $\dfrac{AG}{FG} = \dfrac{\rule{1.5cm}{0.4pt}}{FB}$
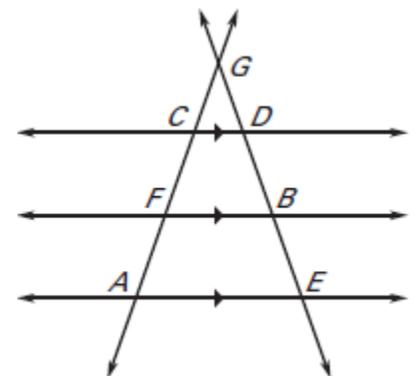
# Proportions & Similar Triangles #1

Find the value of x.

14.

3
3.5
x   9

15.

3
2
x   3.5

16.

3x
5x
60   8x

17.

112
40
25   x

18.

30
x
24
36

19.

25
21
6
x

20.

91
42
x
76

21.

4x − 8
28   36
63

22.

52   20
3x − 16
91
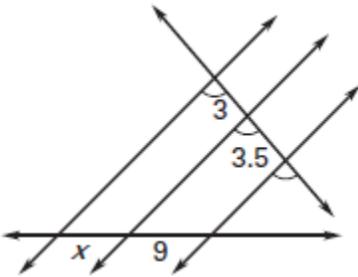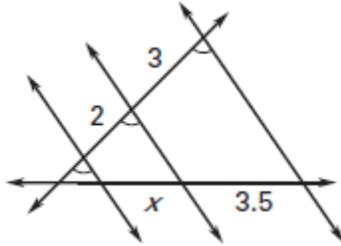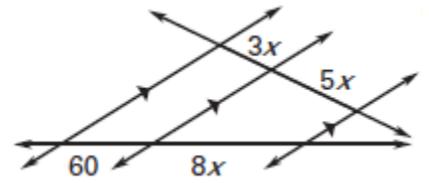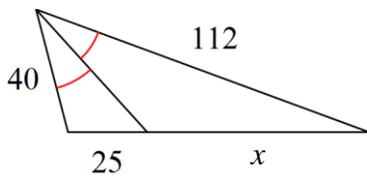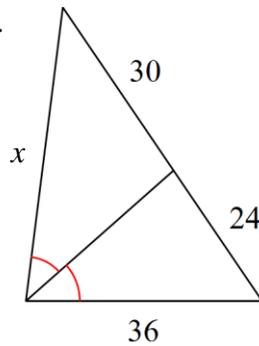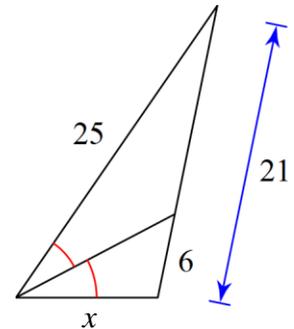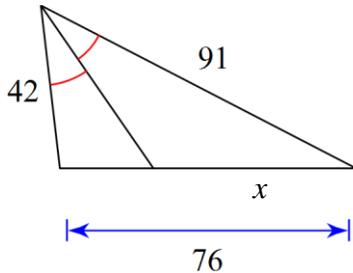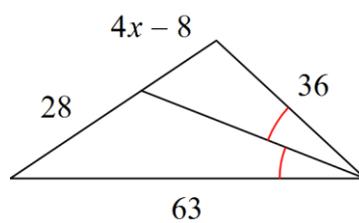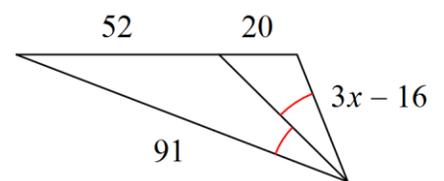
Use the diagram of ΔABC where D, E, and F are the midpoints of the sides.

23. If $EF = 6.5x - 10$ and $AB = 3x + 20$, then find AB.

24. If $DF = 3.5x + 6$ and $BC = 3x + 36$, then find DF.