7-5

Practice

Form G

Proportions in Triangles

Use the figure at the right to complete each proportion.

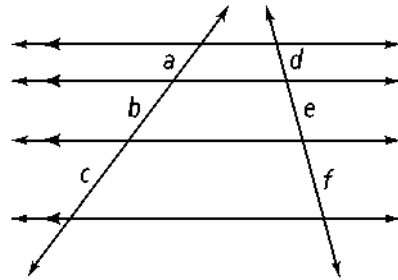1. $\dfrac{a}{c} = \dfrac{\square}{f}$

2. $\dfrac{f}{e} = \dfrac{c}{\square}$

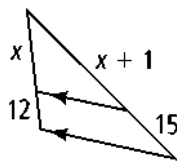3. $\dfrac{\square}{c} = \dfrac{e}{f}$

4. $\dfrac{a}{\square} = \dfrac{b}{e}$

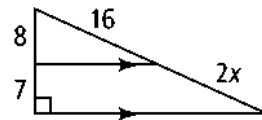5. $\dfrac{a}{b} = \dfrac{\square}{e}$

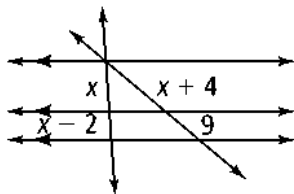6. $\dfrac{e}{\square} = \dfrac{f}{c}$
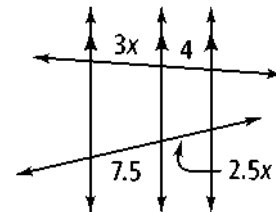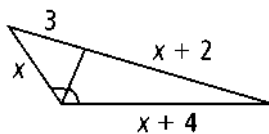
Algebra Solve for *x*.

8.

9.

11.

12.

13.

14.

15.

16.

17.

18.

Proportions in Triangles

7-5

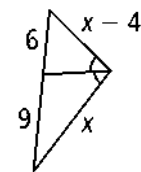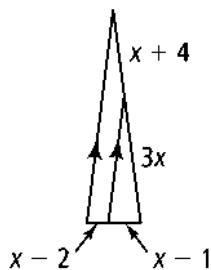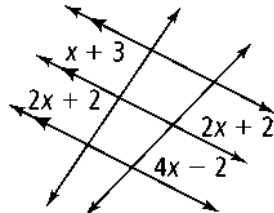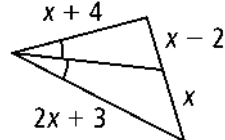**23.** The flag of Antigua and Barbuda is like the image at the right. In the image, $\overline{DF} \parallel \overline{CF} \parallel \overline{BG}$.

  a. An artist has made a sketch of the flag for a mural. The measures indicate the length of the lines in feet. What is the value of x?

  b. What type of triangle is $\triangle ACF$? Explain.

  c. **Given:** $\overline{DF} \parallel \overline{CF} \parallel \overline{BG}$

  Prove: $\triangle ABG \sim \triangle ACF \sim \triangle ADE$