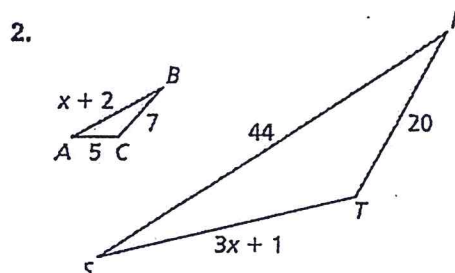
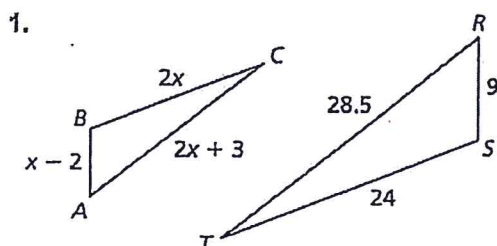


# 8.5 Practice B

In Exercises 1 and 2, find the value of  $x$  that makes  $\triangle ABC \sim \triangle RST$ .

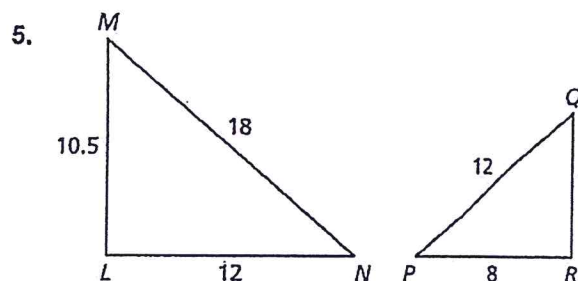
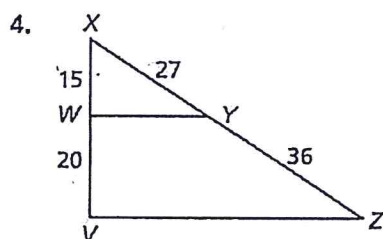


3. Verify that  $\triangle JKL \sim \triangle PQR$ . Find the scale factor of  $\triangle JKL$  to  $\triangle PQR$ .

$$\triangle JKL: JK = 15, KL = 30, JL = 25$$

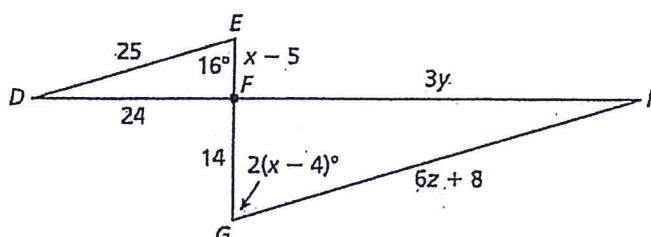
$$\triangle PQR: PQ = 12, QR = 24, PR = 20$$

In Exercises 4 and 5, show that the triangles are similar and write a similarity statement. Explain your reasoning.



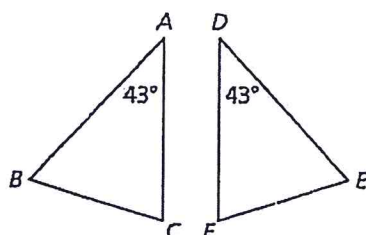
6.  $\triangle ABC$  has side lengths 42, 21, and 35 units. The shortest side of a triangle similar to  $\triangle ABC$  is 9 units long. Find the other lengths of the triangle.

7. Use the figure to find the values of  $x$ ,  $y$ , and  $z$  that makes  $\triangle DEF \sim \triangle HGF$ .



Use the figure to write a two-column proof

8. Given  $\frac{AC}{DF} = \frac{AB}{DE}$  Prove  $\angle B \cong \angle E$



9. Given  $LN = 2x$

$$MN = 2y$$

$$NP = x$$

$$NQ = y$$

Prove  $\triangle MLN \sim \triangle QPN$

