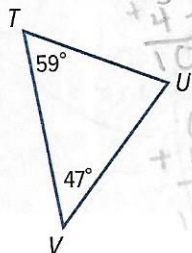
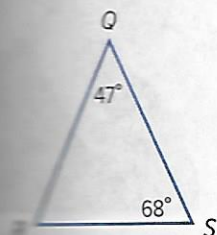


Independent Practice

Go online for Step-by-Step Solutions

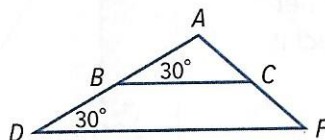


Determine whether the triangles are similar. If so, write a similarity statement. (Example 1)



they're not

2.

 $\triangle BAC \sim \triangle DAF$ b/c $\triangle BAC \sim \triangle DAF$

3. How tall is the building? (Example 2)



h ft



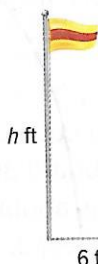
50 ft

12.5 ft

$$\frac{12.5}{50} = \frac{50}{h} \quad 12.5x = 2,500 \quad \frac{2,500}{12.5} = 200$$

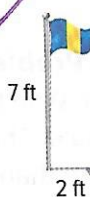
4. How tall is the taller flagpole? (Example 2)

21 ft



h ft

6 ft



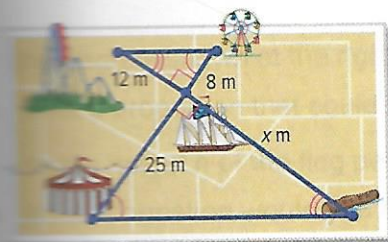
7 ft

2 ft

$$\frac{h}{6} = \frac{7}{2} \quad \frac{42}{2} = 21$$

5. How far is it from the log ride to the pirate ship? (Example 3)

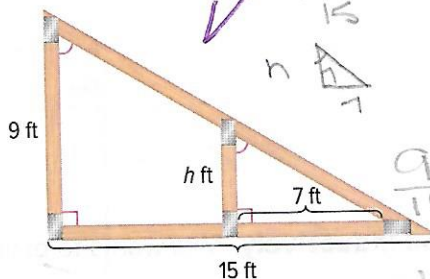
37.5 m



$$\frac{8}{12} = \frac{25}{x} \quad \frac{8x}{300} = 25$$

6. Find the height of the brace. (Example 3)

4.2 ft



9 ft

h ft

7 ft

15 ft

$$\frac{9}{15} = \frac{h}{7}$$

$$\frac{15h}{63} = 4.2$$

1.50

Reason Abstractly The Giant Wheel at Cedar Point in Ohio is one of the tallest Ferris wheels in the country at 136 feet tall. If the Giant Wheel casts a 34-foot shadow, write and solve a proportion to find the height of a nearby man who casts a $1\frac{1}{2}$ -foot shadow.