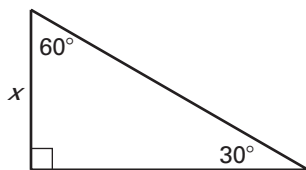
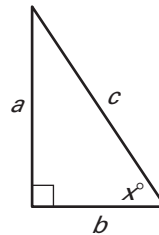
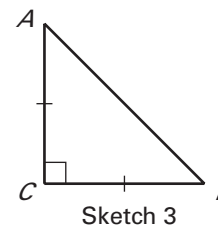
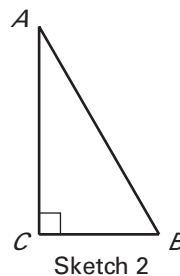
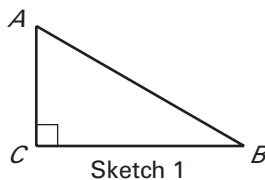


LESSON  
7.5**Challenge Practice**

For use with pages 466–472

**In Exercises 1–3, use the diagram at the right.**

- Write an expression for  $\tan x^\circ$  and an expression for  $\tan(90^\circ - x^\circ)$  in terms of  $a$ ,  $b$ , and  $c$ .
- How are the expressions in Exercise 1 related?
- Will the relationship in Exercise 2 between the tangent of an angle and the tangent of the angle's complement always be true? *Explain.*
- Explain how you can use the special right triangle below to show that  $\tan a^\circ + \tan b^\circ \neq \tan(a^\circ + b^\circ)$ .

**In Exercises 5–7, choose the sketch of  $\triangle ABC$  that makes the statement true. *Explain* your reasoning.**

- $\tan A > 1$
- $\tan A < 1$
- $\tan A = 1$