

## Practice Worksheet: Right Triangles

1. a. Find the exact value of all six trig functions for the angles  $A$  and  $B$  in the triangle in Fig. 1. (The triangle may not be drawn to scale.)

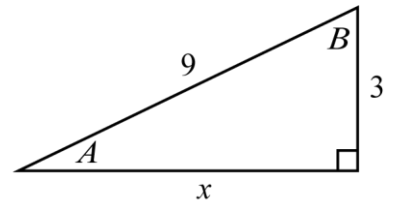
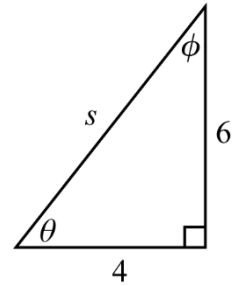


Figure 1

- b. Solve the triangle in Fig. 1 by finding approximate measurements (in degrees) of angles  $A$  and  $B$  and the exact length of the side  $x$ .

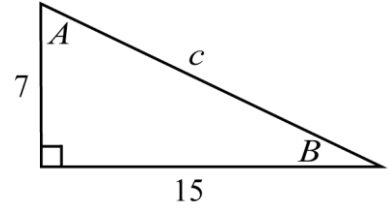
2. a. Find the exact value of all six trig functions for the angles  $\theta$  and  $\phi$  in the triangle in Fig. 2. (The triangle may not be drawn to scale.)



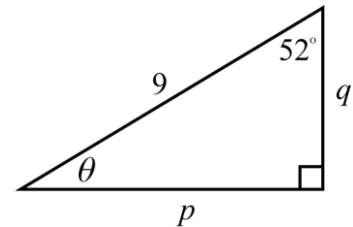
**Figure 2**

- b. Solve the triangle in Fig. 2 by finding approximate measurements (in degrees) of angles  $\theta$  and  $\phi$  and the exact length of the side  $s$ .

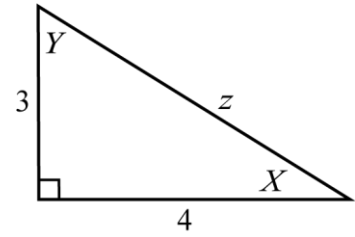
3. Find the values of  $c$ ,  $A$ , and  $B$  in the triangle in Figure 3. You should approximate the values (in degrees for the angles) and denote your approximations correctly. (The triangle may not be drawn to scale.)

**Figure 3**

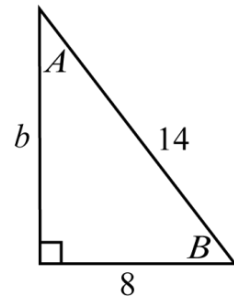
4. Find the values of  $p$ ,  $q$ , and  $\theta$  in the triangle in Figure 4. You should approximate the values (in degrees for the angles) and denote your approximations correctly. (The triangle may not be drawn to scale.)

**Figure 4**

5. Find the values of  $z$ ,  $X$  and  $Y$  in the triangle in Figure 5. You should approximate the values (in degrees for the angles) and denote your approximations correctly. (The triangle may not be drawn to scale.)

**Figure 5**

6. Find the values of  $b$ ,  $A$ , and  $B$  in the triangle in Figure 6. You should approximate the values (in degrees for the angles) and denote your approximations correctly. (The triangle may not be drawn to scale.)

**Figure 6**