

## 4.3 Right Triangle Trigonometry

Name:

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**P 13.** If  $\theta$  is an acute angle and

$$\tan \theta = \frac{3}{4}$$

Find the five other basic trigonometric functions of  $\theta$ .

**P 20.** If  $\theta$  is an acute angle and

$$\csc \theta = 9$$

Find the five other basic trigonometric functions of  $\theta$ .

**P 33.** If  $\theta$  is an acute angle and

$$\cos \theta = \frac{1}{3}$$

Find

(a)  $\sin \theta$

(c)  $\tan \theta$

(b)  $\sec \theta$

(d)  $\csc(90^\circ - \theta)$

**P 59.** Find the value of  $\theta$  in radians such that

$$\sec \theta = 2$$

**P 70.** You are skiing down a mountain with a vertical height of 1500 feet. The distance from the top of the mountain to the base is 3000 feet. What is the angle of elevation from the base to the top of the mountain?