

# 14

# Trigonometric Graphs, Identities, and Equations



P.1.A

2A.4.B

P.2.C

2A.2.A

P.3.B

P.3.A

P.3.A

- 14.1 Graph Sine, Cosine, and Tangent Functions
- 14.2 Translate and Reflect Trigonometric Graphs
- 14.3 Verify Trigonometric Identities
- 14.4 Solve Trigonometric Equations
- 14.5 Write Trigonometric Functions and Models
- 14.6 Apply Sum and Difference Formulas
- 14.7 Apply Double-Angle and Half-Angle Formulas

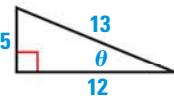
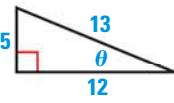
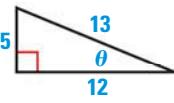
## Before

In Chapter 13, you learned the following skills, which you'll use in Chapter 14: evaluating trigonometric functions, finding reference angles, and evaluating inverse trigonometric functions.

## Prerequisite Skills

### VOCABULARY CHECK

Copy and complete the statement.

1. The **sine** of  $\theta$  is \_\_\_\_\_.  

2. The **cosine** of  $\theta$  is \_\_\_\_\_.  

3. The **tangent** of  $\theta$  is \_\_\_\_\_.  


### SKILLS CHECK

Evaluate the expression. (Review p. 866 for 14.1.)

4.  $\sin 45^\circ$       5.  $\cos \frac{\pi}{2}$       6.  $\tan \frac{\pi}{3}$

Sketch the angle. Then find its reference angle. (Review p. 866 for 14.1.)

7.  $-165^\circ$       8.  $285^\circ$       9.  $-\frac{5\pi}{8}$

Evaluate the expression. (Review p. 875 for 14.4.)

10.  $\sin^{-1} \frac{\sqrt{3}}{2}$       11.  $\cos^{-1} 1$       12.  $\tan^{-1} \sqrt{3}$



TEXAS

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Prerequisite skills practice at classzone.com