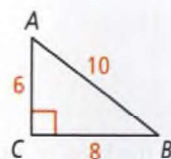## Lesson Check

Do you know HOW?

Find each trigonometric ratio for angle A in the triangle at the right.

1. $\sin A$ 2. $\cos A$ 3. $\tan A$

Solve using trigonometric ratios.

4. A right triangle has a 40° angle. The hypotenuse is 10 cm long. What is the length of the side opposite the 40° angle?

5. A right triangle's legs are 7 in. and 24 in. long. What is the measure of the angle opposite the 24-in. leg?

Do you UNDERSTAND? ⓒ MATHEMATICAL PRACTICES

ⓒ 6. **Vocabulary** Describe the difference between finding the sine of an angle and the cosine of an angle.

ⓒ 7. **Error Analysis** In a right triangle, the hypotenuse is 5 in. long, and the side opposite ∠A is 4.5 in. long. A student found the measure of ∠A as shown on the calculator screen at the right. Describe and correct the student's error.

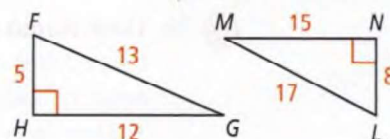| sin (.9)	
	.0157073173
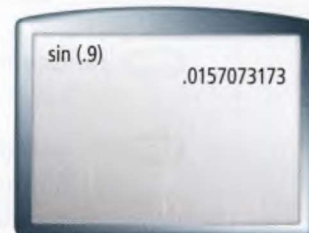
Practice and Problem-Solving Exercises ⓒ MATHEMATICAL PRACTICES

Ⓐ Practice

For △FGH and △LMN, find the value of each expression.   ◀ See Problem 1.

8. $\sin F$ 9. $\cos F$ 10. $\tan G$

11. $\cos L$ 12. $\tan M$ 13. $\sin M$

14. $\tan F$ 15. $\sin G$ 16. $\tan L$
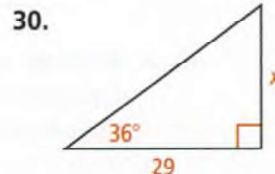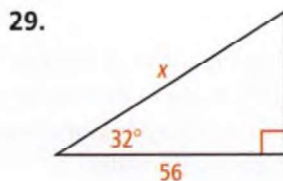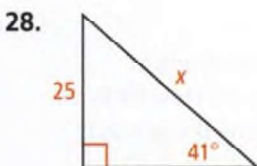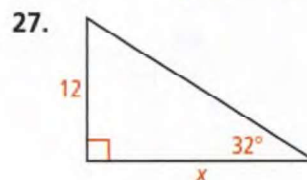
Find the value of each expression. Round to the nearest ten-thousandth.   ◀ See Problem 2.

17. $\sin 10°$ 18. $\tan 25°$

19. $\cos 85°$ 20. $\tan 12°$

21. $\sin 70°$ 22. $\cos 22°$

23. $\sin 71°$ 24. $\tan 30°$

Find the value of x to the nearest tenth.   ◀ See Problem 3.

25.

26.

27.

28.

29.

30.