

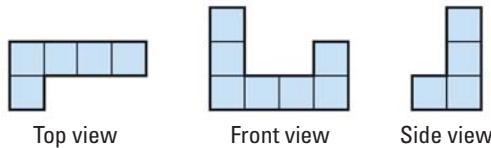


MIXED REVIEW FOR TAKS

REVIEW

TAKS Preparation
p. 228;
TAKS Workbook

- 30. TAKS PRACTICE** The top, front, and side views of a solid built with cubes are shown below. How many cubes are needed to construct this solid? **TAKS Obj. 7**



(A) 7

(B) 8

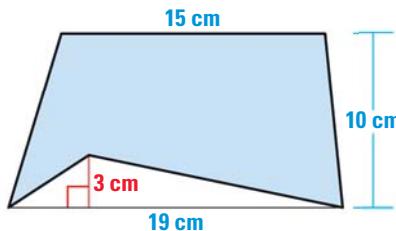
(C) 9

(D) 10

REVIEW

TAKS Preparation
p. 470;
TAKS Workbook

- 31. TAKS PRACTICE** What is the area of the blue figure shown at the right? **TAKS Obj. 8**

(F) 48.5 cm^2 (G) 113.0 cm^2 (H) 141.5 cm^2 (J) 283.0 cm^2 

QUIZ for Lessons 14.3–14.5

Simplify the expression. **(p. 924)**

1. $\sin x \sec x$

2. $\sin \theta (1 + \cot^2 \theta)$

3. $\tan\left(\frac{\pi}{2} - \theta\right) \cot \theta - \csc^2 \theta$

4. $\cos^2 \theta + \sin^2 \theta + \tan^2 \theta$

5. $\frac{\tan\left(\frac{\pi}{2} - x\right) \sec x}{1 - \csc^2 x}$

6. $\frac{\sin(-x)}{\csc x} + \frac{\cos(-x)}{\sec x}$

Find the general solution of the equation. **(p. 931)**

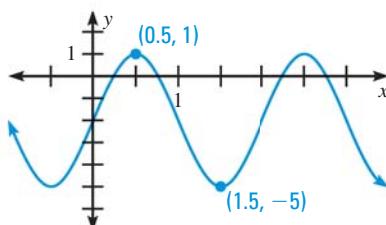
7. $\cos x + \cos(-x) = 1$

8. $\sqrt{2} \cos x \sin x - \cos x = 0$

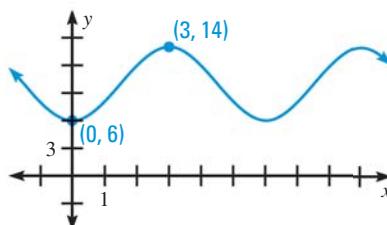
9. $2 \sin^2 x - \sin x = 1$

Write a function for the sinusoid. **(p. 941)**

10.



11.



- 12. DAILY TEMPERATURES** The table below shows the average daily temperature D (in degrees Fahrenheit) in Detroit, Michigan. The time t is measured in months, with $t = 1$ representing January. Use a graphing calculator to write a sinusoidal model that gives D as a function of t . **(p. 941)**

<i>t</i>	1	2	3	4	5	6	7	8	9	10	11	12
<i>D</i>	24.5	27.2	36.9	48.1	59.8	69	73.5	71.8	63.9	51.9	40.7	29.6

