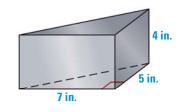


MIXED TAKS PRACTICE

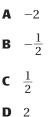
9. Jenny is making candles as gifts for her friends. One of the candle molds she is using is in the shape of a right prism with the dimensions shown. What is the volume of this candle mold? *TAKS Obj. 8*



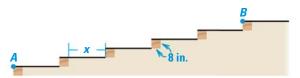
- **A** 35 in.³
- **B** 60 in.³
- **C** 70 in.³
- **D** 140 in.³
- 10. Julia has \$30 to spend on two types of yarn. Cotton yarn costs \$3.50 per ball, and wool yarn costs \$4.50 per ball. Which inequality represents the possible numbers of balls of cotton yarn, *c*, and wool yarn, *w*, that she can buy? *TAKS Obj. 4*
 - **F** $3.5c 4.5w \le 30$
 - **G** $3.5c + 4.5w \le 30$
 - **H** $3.5c 4.5w \ge 30$
 - **J** $3.5c + 4.5w \ge 30$
- 11. Angle *A* and angle *B* are vertical angles. The measure of $\angle A$ is $(5x + 4)^\circ$. The measure of $\angle B$ is $(3x + 10)^\circ$. What is the value of *x*? *TAKS Obj. 6*
 - **A** 2
 - **B** 3
 - **c** $\frac{14}{3}$

 - **D** 7
- **12.** What are the coordinates of the *x*-intercept of the line 2y = 10 + 5x? *TAKS Obj. 3*
 - **F** (−2, 0)
 - **G** (0, −2)
 - **H** (0, 5)
 - **J** (5, 0)

13. What is the slope of the line identified by 3y = -6(x + 2)? **TAKS Obj. 3**



- 14. Given the line y = 2.7x + 32.6, which statement best describes the effect of decreasing the *y*-intercept by 65.2? *TAKS Obj. 3*
 - **F** The new line is parallel to the original.
 - **G** The new line has a lesser rate of change.
 - **H** The *x*-intercept decreases.
 - **J** The *y*-intercept increases.
- 15. A right circular cone has a volume of 16 cubic centimeters. The radius and height are each increased to two times their original size. What is the volume of the new right circular cone? TAKS Obj. 8
 - **A** 32 cm³
 - **B** 64 cm^3
 - **C** 128 cm^3
 - \mathbf{D} 256 cm³
- 16. GRIDDED ANSWER An uphill park trail has been improved by building steps from wooden timbers, as shown in the diagram. The width of each timber is 8 inches. The horizontal distance between points *A* and *B* is 388 inches. What should be the distance *x* between timbers? Round your answer to the nearest tenth of an inch. *TAKS Obj. 10*



Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.