## 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


7 in.
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 $3.5 c-4.5 w \leq 30$
G $3.5 c+4.5 w \leq 30$
H $3.5 c-4.5 w \geq 30$
J $3.5 c+4.5 w \geq 30$
11. Angle $A$ and angle $B$ are vertical angles. The measure of $\angle A$ is $(5 x+4)^{\circ}$. The measure of $\angle B$ is $(3 x+10)^{\circ}$. 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 $2 y=10+5 x$ ? 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 $3 y=-6(x+2) ?$ TAKS Obj. 3
A -2
B $-\frac{1}{2}$
C $\frac{1}{2}$
D 2
14. Given the line $y=2.7 x+32.6$, 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 $32 \mathrm{~cm}^{3}$
B $64 \mathrm{~cm}^{3}$
C $128 \mathrm{~cm}^{3}$
D $256 \mathrm{~cm}^{3}$
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.

