

MIXED TAKS PRACTICE

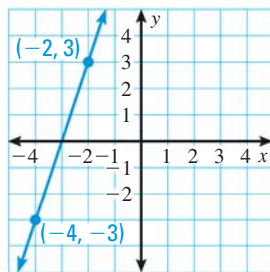
6. A bag contains 11 red marbles, 3 white marbles, and 6 blue marbles. You randomly select 2 marbles, replacing the first marble before drawing the second. What is the probability, to the nearest thousandth, of drawing a red marble and then a blue marble? **TAKS Obj. 9**

F 0.083
G 0.165
H 0.174
J 0.228

7. A cylindrical can has a volume of 126 cubic inches. What would be the volume of a similar cylindrical can with a radius half as long as the original can's radius? **TAKS Obj. 8**

A 15.75 in.³
B 21 in.³
C 31.5 in.³
D 63 in.³

8. What is the y -intercept of the graph? **TAKS Obj. 3**



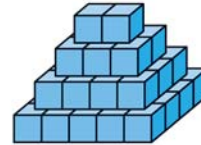
F -3
G 6
H 9
J 12

9. What is the solution of the equation

$$\frac{3}{5}(10x - 15) = 3x - 5(x - 3)? \text{ TAKS Obj. 2}$$

A -15
B 0
C 3
D 6

10. Which expression describes the number of blocks in the n th layer, where $n = 1$ represents the top layer? **TAKS Obj. 10**



F $n + 1$
G $n(n + 1)$
H $2n^2$
J $n^2 + 1$

11. How many faces, edges, and vertices does a triangular prism have? **TAKS Obj. 7**

A 3 faces, 3 edges, and 6 vertices
B 4 faces, 6 edges, and 4 vertices
C 5 faces, 8 edges, and 5 vertices
D 5 faces, 9 edges, and 6 vertices

12. What are the x -intercepts of the graph of the equation $y = x^2 - 8x + 15$? **TAKS Obj. 5**

F $x = -3, x = -5$
G $x = -3, x = 5$
H $x = 3, x = -5$
J $x = 3, x = 5$

13. **GRIDDED ANSWER** The table shows the approximate age distribution of U.S. citizens. What is the probability that a randomly selected U.S. citizen is at least 20 years old? **TAKS Obj. 9**

Age	Population
19 and under	28%
20-34	21%
35-59	35%
60 and over	16%

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