

MIXED TAKS PRACTICE

7. George analyzes the results of a survey identifying the number of minutes per day that people spend on the Internet. Which measure of data describes the most frequent amount of time spent on the Internet? **TAKS Obj. 9**
- A** Mean
B Median
C Mode
D Range
8. The vertices of a right triangle are (0, 0), (0, 8), and (8, 0). What is the length of the hypotenuse? **TAKS Obj. 7**
- F** 8
G $8\sqrt{2}$
H 64
J 128
9. What is the y -intercept of the line identified by $6x - 10y = 25$? **TAKS Obj. 3**
- A** $b = -\frac{5}{2}$
B $b = \frac{3}{5}$
C $b = \frac{25}{6}$
D $b = 25$
10. Which equation best describes the relationship between x and y shown in the table? **TAKS Obj. 1**
- | x | y |
|-----|-----|
| 1 | 7 |
| 2 | 12 |
| 3 | 17 |
| 5 | 27 |
- F** $y = 5x + 2$
G $x = 5y + 2$
H $y = 5x^2 + 2$
J $x = 5y^2 + 2$
11. What is the solution of the equation $\frac{1}{3}(7x + 5) - 2(x - 3) = 3x - 5$? **TAKS Obj. 2**
- A** $\frac{1}{4}$
B 1
C $\frac{19}{4}$
D No solution
12. During one week, Alicia earns \$405 working 45 hours at two jobs. Her retail job pays \$9.50 per hour and her babysitting job pays \$8 per hour. Which system of equations can be used to find x , the number of hours Alicia works at her retail job, and y , the number of hours she babysits? **TAKS Obj. 4**
- F** $x - y = 45$
 $8x + 9.5y = 405$
G $x - y = 405$
 $9.5x + 8y = 45$
H $x + y = 45$
 $8x + 9.5y = 405$
J $x + y = 45$
 $9.5x + 8y = 405$
13. Henry designs a box to contain 36 three-inch cubes. The cubes are stacked 3 high and 2 wide. What are the dimensions of the smallest possible box? **TAKS Obj. 10**
- A** 2 in. by 3 in. by 6 in.
B 4 in. by 6 in. by 12 in.
C 6 in. by 9 in. by 18 in.
D 8 in. by 10 in. by 20 in.
14. **GRIDDED ANSWER** At an awards banquet, 1 softball player and 2 soccer players are seated randomly together in a row. What is the probability that the 2 soccer players are *not* seated next to each other? Round your answer to the nearest hundredth. **TAKS Obj. 9**
- Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.*