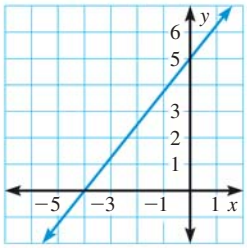
MIXED TAKS PRACTICE

7. Which equation does the graph represent? *TAKS Obj. 1*



A $5x - 4y = -20$

B $5x - 4y = 20$

C $5x + 4y = -20$

D $5x + 4y = 0$

8. A person is standing at the end of the shadow of a bur oak tree, 40 feet from the tree's base. The angle of elevation to the sun is about 60°. About how tall is the tree? *TAKS Obj. 6*

F 40 ft

G 56 ft

H 69 ft

J 80 ft

9. Hooke's law states that the distance a spring is stretched (or compressed) is directly proportional to the force on the spring. A force of 50 pounds stretches a spring 3 inches. What force is required to stretch the same spring 4.5 inches? *TAKS Obj. 3*

A 33 lb

B 60 lb

C 75 lb

D 90 lb

10. Which equation will produce the narrowest parabola when graphed? *TAKS Obj. 5*

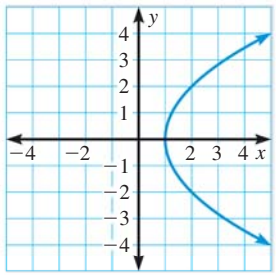
F $y = -1.5x^2$

G $y = -\frac{2}{3}x^2$

H $y = 0.5x^2$

J $y = 2x^2$

11. What is the domain of the relation shown in the graph? *TAKS Obj. 2*



A $-4 \le x \le 4$

B $x \le 1$

C $x \ge 1$

D All real numbers

12. The list shows Lisa's scores on four of five exams. To achieve a final grade of A, she needs a final average of 90 or greater. Which inequality represents the possible scores s Lisa can earn on the fifth exam if she is to achieve a final grade of A? *TAKS Obj. 4*

94, 85, 89, 90

F $s \le 90$

G $s \le 96$

H $s \ge 90$

J $s \ge 92$

13. What is the slope of the line identified by $3y = 15(x - 5)$? *TAKS Obj. 3*

A -25

B -5

C 5

D 18

14. **GRIDDED ANSWER** The price of a digital audio player is \$212.50. The total cost, including sales tax, is \$227.91. What is the sales tax to the nearest percent? *TAKS Obj. 9*

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