MIXED TAKS PRACTICE

7. What is the y-intercept of the line identified by the equation $4x + 3y = 1$? *TAKS Obj. 3*

A $-\frac{1}{4}$

B $\frac{1}{3}$

C 1

D 3

8. Which ordered pair is a solution of the inequality $9x - 2y \geq 18$? *TAKS Obj. 4*

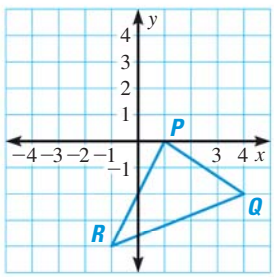
F $(-5, -7)$

G $(-1, 0)$

H $(1, 2)$

J $\left(3, -\frac{5}{2}\right)$

9. If $\triangle PQR$ is rotated 90° clockwise about the origin, in which quadrant will the image of point R appear? *TAKS Obj. 7*



A Quadrant I

B Quadrant II

C Quadrant III

D Quadrant IV

10. What is the slope of a line that is parallel to the line $x + 3y = -8$? *TAKS Obj. 7*

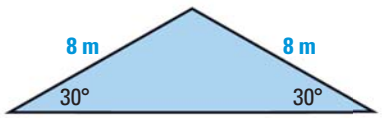
F -3

G $-\frac{1}{3}$

H $\frac{1}{3}$

J 3

11. What is the approximate area of the triangle shown? *TAKS Obj. 6*



A 13.9 m^2

B 27.7 m^2

C 55.4 m^2

D 110.9 m^2

12. The *gear ratio* of a bicycle is the number of teeth in the chainwheel divided by the number of teeth in the freewheel. The number w of rear-wheel revolutions is equal to the product of the gear ratio and the number p of pedal revolutions. A bicycle in first gear has 24 teeth in the chainwheel and 32 teeth in the freewheel. Which function gives w in terms of p for a bicycle in first gear? *TAKS Obj. 1*

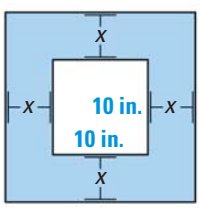
F $w = -\frac{4}{3}p$

G $w = \frac{3}{4}p$

H $w = \frac{4}{3}p$

J $w = \frac{3}{4}p^2$

13. GRIDDED ANSWER Bill is designing a mosaic tile picture frame for a 10 inch by 10 inch photograph. He wants the frame to provide a uniform border around the photograph, and he has enough mosaic tiles to cover 300 square inches. What is the largest possible frame width, x, in inches? *TAKS Obj. 5*



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