Name_____

Geometry Pretest

1. Find the slope of the line passing through the points (–6, 8) and (–1, 4).

   [A] $-\frac{7}{12}$ [B] $-\frac{4}{5}$ [C] $-\frac{12}{7}$ [D] $-\frac{5}{4}$

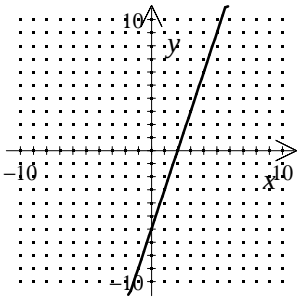
2. What is the y-intercept of the line $3x + y = 3$? [A] 1 [B] –1 [C] –3 [D] 3

3. Write the standard form of the equation of the line with slope 0 passing through the point (3, 2).

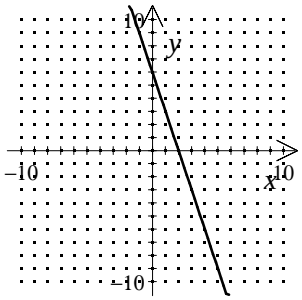
   [A] $x - 3 = 0$ [B] $x - 2 = 0$ [C] $y - 2 = 0$ [D] $y - 3 = 0$

4. Graph: $3x - y = 6$

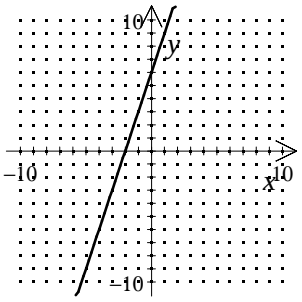
   [A]



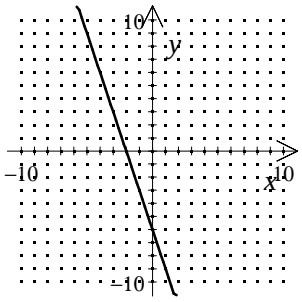
   [B]



   [C]



   [D]



5. Give the standard form of the equation of the line that has a slope of –3 and contains $(0, -4)$.

   [A] $3x + y = 12$ [B] $3x + y = -4$ [C] $4x + y = 3$ [D] $3x - y = 4$

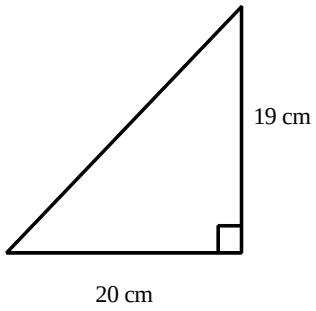
6. Which of the following lines is *not* parallel to $y = 5x - 4$?

   [A] $5x - y = -1$ [B] $y = x - 4$ [C] $y - 5x = 3$ [D] $10x - 2y = -1$

Name_____

Geometry Pretest

7. Given the right triangle below, what is the length of the hypotenuse? Round your answer to the nearest tenth.



[A] 761.0 cm [B] 39.0 cm [C] 27.6 cm [D] 6.2 cm

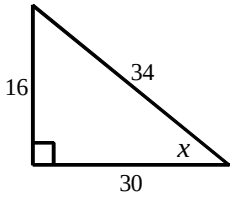
8. Find the distance between the points (–1, –5) and (3, –2). Round your answer to the nearest tenth.

[A] 25.0 [B] 7.3 [C] 7.0 [D] 5.0

9. Find the midpoint of (0, –1) and (–10, 9).

[A] (–5, 4) [B] (10, 10) [C] (–10, 8) [D] (5, 5)

10. Use the diagram to find cos x as a fraction in simplest form.

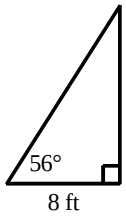


[A] $\frac{8}{17}$ [B] $\frac{8}{15}$ [C] $1\frac{7}{8}$ [D] $\frac{15}{17}$

Name_____

Geometry Pretest

11. A ladder leans against a building forming an angle of $56°$ with the ground. The base of the ladder is 8 feet from the building. Use the cosine to determine the length of the ladder.



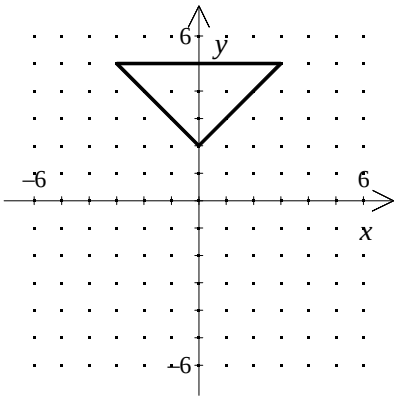
[A] 9.65 ft [B] 14.31 ft [C] 11.86 ft [D] 14.66 ft

12. If the area of a circle is known, the radius can be found by the formula: $r = \sqrt{\frac{A}{\pi}}$. Find the radius of a circle if its area is 10. Round your answer to the nearest tenth.

[A] 1.8 [B] 0.3 [C] 0.6 [D] 3.2

13. Simplify: $6\sqrt{7} + 7\sqrt{7} - 2\sqrt{7}$ [A] $11\sqrt{7}$ [B] $15\sqrt{7}$ [C] 77 [D] $\sqrt{77}$

14. Find the perimeter of the triangle.



[A] $6 + 3\sqrt{2}$ [B] $3 - 3\sqrt{2}$ [C] $6 + 6\sqrt{2}$ [D] $6 - 3\sqrt{2}$

15. Solve: $\sqrt{5x-4} = \sqrt{4x+5}$ [A] 1 [B] 9 [C] no solution [D] 8

Name_____

Geometry Pretest

16. Which of the following has no *real* solution?

[A] $3\sqrt{x}-3=-1$ [B] $\sqrt{x}-3=-1$ [C] $2\sqrt{x}-3=1$

[D] $\sqrt{x}+3=4$ [E] $\sqrt{x}+2=1$