

Flashback #5

1. Which of the following attains a minimum value at $(4, -1)$?

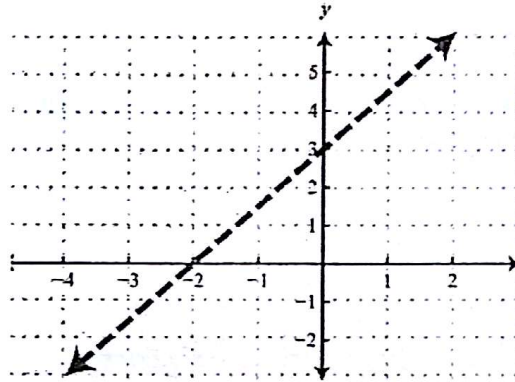
$$3x + 2y$$

$$3x + 4y$$

$$3x + 10y$$

$$10x + 3y$$

2. Give the inequality that can be represented by the following graph.



3. Given that the zeros of a quadratic function are -5 and 9 , and the graph has a y -intercept of -90 , what is the vertex of the function?

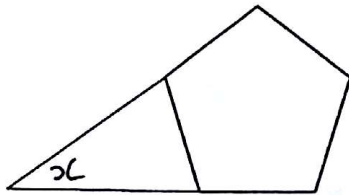
4. Factor $20x^2 + 6x - 8$

5. Describe the graph $y = -3(x + 5)^2 - 2$

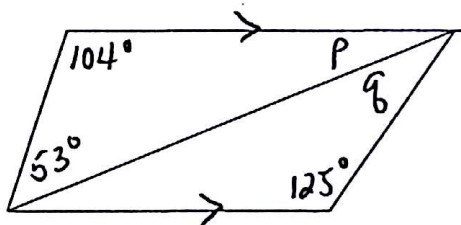
6. The average mass of golf balls produced at a factory is 45.6 grams 0.3 grams. The results are accurate 19 out of 20 times. Determine the confidence level, confidence interval and margin of error.

7. In triangle ABC , $a = 24.1\text{ cm}$, $b = 18.3\text{ cm}$ and $c = 22\text{ cm}$. Determine the largest angle to the nearest tenth of a degree.

8. The diagram shows a regular pentagon and a triangle. The value of x and explain your reasoning.



9. Determine the missing angles and provide your reasoning.



10. Consider:
- All clarinet players are musicians
 - Fred is a clarinet player

What conclusion can be made? Can you prove it?