Flashback #5

1. Which of the following attains a <u>minimum value</u> at (4, -1)?
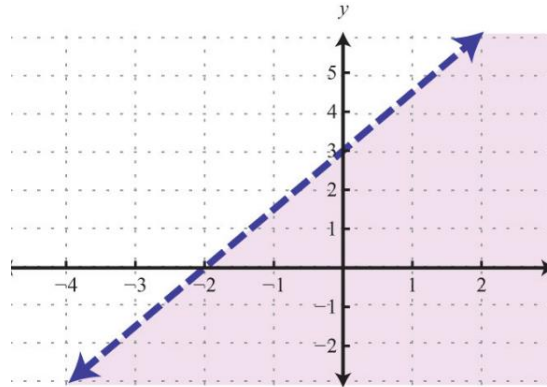
       3x + 2y   3x + 4y   3x + 10y   10x + 3y

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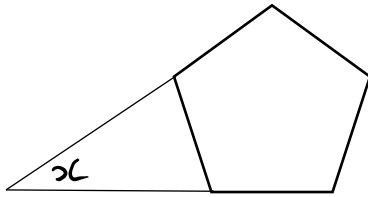
4. Factor $20x^2 + 6x - 8$

5. Describe the graph $y = -3(x+5)^2 - 2$
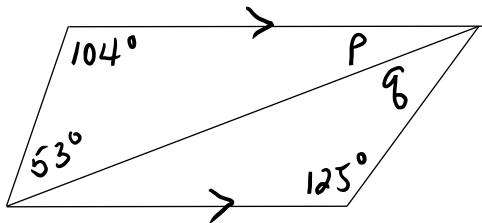
6. The average mass of golf balls produced at a factory is 45.6 grams 0.3 grams. The results are accurate 19 out of 20 times. Determine the confidence level, confidence interval and margin of error.

7. In triangle ABC, $a = 24.1\,cm, b = 18.3\,cm$ and $c = 22\,cm$. 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?