

Topics in Algebra, Trigonometry and Pre-Calculus

9th February 2010

Round-up Homework

Please note that the following questions refer to the following units

- Sketching quadratic equations: Q1-Q3;
- Systems of linear inequalities: Q4-Q6.

Questions

1. Sketch the following graph $f(x) = 4x^2 - 4x - 3$.
2. What is the axis of symmetry of the following graph $y = 3x^2 - 5x + 9$.
3. Sketch the equation $y + 1 = 2x^2 - 12x$.
4. Sketch the interval $\{(x, y) : -1 < x < 3 \text{ and } 2 < y < 4\}$.
5. Sketch the interval $\{(x, y) : y \leq -2x - 3\}$.
6. Sketch the interval $\{(x, y) : -2x - 3 \leq y < 3x + 1\}$.