Math 20-1

KEY

L36 – EQ – 9.2 Quadratic Inequalities in One Variable

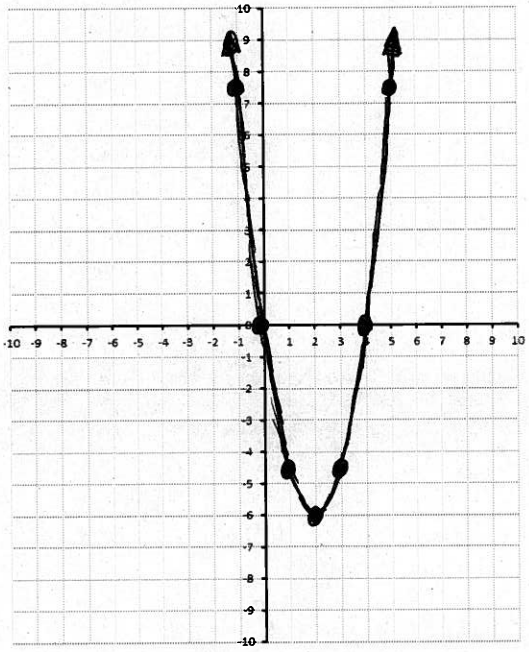
Use the following information to answer Q1-Q2:

Quadratic Inequality in One Variable:

$$\frac{3}{2}(x-2)^2 - 6 \geq 0$$

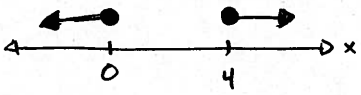
Q1: Graph the function $y = \frac{3}{2}(x-2)^2 - 6$. *(1 mark)*

x	y
-1	7.5
0	0
1	-4.5
2	-6
3	-4.5
4	0
5	7.5



Q2: For which values of x is $\frac{3}{2}(x-2)^2 - 6 \geq 0$?

a. $\{x|\ 0 < x < 4, x \in R\}$
b. $\{x|\ 0 \leq x \leq 4, x \in R\}$
c. $\{x|\ x < 0\ and\ x > 4, x \in R\}$
d. $\{x|\ x \leq 0\ and\ x \geq 4, x \in R\}$



KEY

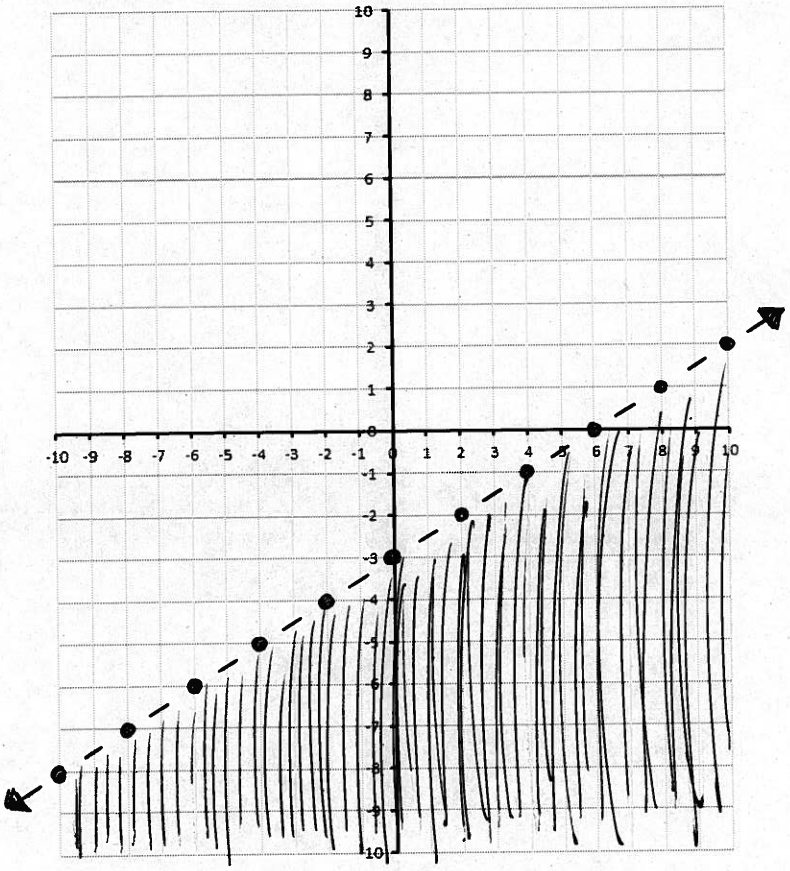
Math 20-1

Use the following information to answer Q3:

Linear Inequality in Two Variables:

$$y < \frac{1}{2}x - 3$$

Q3: Sketch the linear inequality below. *(2 marks)*



MARKING:

Beginning	0.0 – 1.5
Progressing	2.0 – 2.5
Competent	3.0 – 3.5
Exemplary	4.0