ANSWERS

A) $x =$ _____

B) _____

C) (_____ , _____ , _____)

A) For some <u>positive</u> constant A, if $x = 1$ is a solution of the equation $|x - A| = 5$, what is the other solution?

B) Given: $(2x - A)(3x + B) = 0$ for positive integer constants A and B.
Compute $A^2 - B^2$, if $A + B = 7$ and the sum of the solutions (for x) is an integer.

C) Given: $x \# y = \dfrac{x}{2} + \dfrac{y}{3}$ for integers x and y.

For some <u>minimum</u> integer $k > 10$, $\begin{cases} x \# y = k \\ 2x + 3y = k \end{cases}$. Compute the ordered triple (k, x, y).