

Quiz 3

Name:

Perm Number:

1) Write the following fraction as a mixed number (that is, a whole number and a simplified fraction less than 1).

$$766 = 720 + 36 + 10 \quad \frac{766}{12} = 80 + 3 + \frac{10}{12}$$

$$= 80 \cdot 12 + 3 \cdot 12 + 10$$

$$83 \frac{5}{6}$$

2) Substitute $x = kt + p$ into

$$x^2 - 2px + 7$$

Simplify the result as much as possible.

When you're done, write the result of this simplification here —————>

$$k^2t^2 - p^2 + 7$$

$$x^2 = (kt + p)^2 = k^2t^2 + 2ktp + p^2$$

$$-2px = -2p(kt + p) = -2ktp - 2p^2$$

$$\text{So } \underline{x^2} - \underline{2px} + 7 = \underline{k^2t^2 + \cancel{2ktp} + \cancel{p^2}} - \underline{\cancel{2ktp} + \cancel{2p^2}} + 7$$

$$= k^2t^2 - p^2 + 7$$

- 3) Find the equation of a line with slope $m = 3$ and y -intercept $b = -5$.

$$y = mx + b$$

$$y = 3x - 5$$

- 4) Find the equation of a line with slope $m = 3$ passing through the point $(1, 6)$.

$$y = 6 + 3(x - 1)$$

$$\text{or}$$

$$y = 3x + 3$$

- 5) Find the point where the lines with equations $y = 5x - 10$ and $y = -3x + 6$ cross.

$$5x - 10 = y = -3x + 6$$

$$8x = 16$$

$$x = 2$$

$$(x, y) =$$

$$(2, 0)$$