

## Quiz 3

Name:

Nicholas Prasad

Perm Number:

5635750

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

$$\frac{766}{12}$$

$$\begin{array}{r} 24 \\ \times 12 \\ \hline 48 \\ 240 \\ \hline 288 \end{array}$$

$$\begin{array}{r} 500 \\ \times 12 \\ \hline 1000 \\ 6000 \\ \hline 6000 \end{array}$$

$$63 \frac{10}{12}$$

$$\begin{array}{r} 63 \\ \times 12 \\ \hline 126 \\ 630 \\ \hline 756 \\ + 12 \\ \hline 768 \end{array}$$

$$63 \frac{10}{12}$$

- 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

$$kt^2 - p^2 + 7$$

$$(kt + p)^2 - 2p(kt + p) + 7$$

$$kt^2 + 2ktp + p^2 - 2ktp - 2p^2 + 7$$

$$kt^2 - p^2 + 7$$

	$kt$	$+p$
$kt$	$kt^2$	$ktp$
$+p$	$ktp$	$p^2$

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

$$y = 3x - 5$$

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

$$6 = 3(1) + b$$

$$\begin{array}{r} -3 \\ -3 \end{array}$$

$$3 = b$$

$$y = 3x + 3$$

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

$$\begin{array}{r} 5x - 10 = -3x + 6 \\ -6 \quad \quad -6 \\ \hline -16 = -8x \end{array}$$

$$2 = x$$

$$y = 5(2) - 10$$

$$y = 0$$

$$0 = 5(2) - 10$$

$$0 = 0$$

$$0 = -3(2) + 6$$

$$0 = 0$$

$$(x, y) = (2, 0)$$

## Quiz 3

Name:

Harper Giordano

Perm Number:

5884150

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{72} \phantom{0} \\ 46 \\ \underline{36} \\ 10 \end{array}$$

$$\rightarrow 63 \frac{10}{12} = 63 \frac{5}{6} \rightarrow$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array}$$

$$\begin{array}{r} 63 \\ \times 12 \\ \hline 126 \\ 620 \\ \hline 756 \end{array}$$

check:

$$63 \times 12 = 756$$

$$756 + 10 = 766 \checkmark$$

- 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

$$(kt)^2 - p^2 + 7$$

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

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$(kt)^2 + \cancel{kt(p)} + \cancel{kt(p)} + p^2 - \cancel{2p(kt)} - 2p^2 + 7$$

$$(kt)^2 - p^2 + 7$$

$$(kt+p)(kt+p)$$

$$y - y_0 = m(x - x_0)$$

$$y = mx + b$$

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

$$y = mx + b$$

$$y = 3x - 5$$

$$y = 3x - 5$$

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

$$y = mx + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$b = 3$$

$$y = 3x + 3$$

$$y = 3x + 3$$

check:

$$y = 3x + 3$$

$$6 = 3(1) + 3 = 6 \checkmark$$

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

$$y = 5x - 10$$

$$y = -3x + 6$$

$$(x, y) = (2, 0)$$

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

$$8x = 16$$

$$x = 2$$

→

$$y = -3x + 6$$

$$y = -3(2) + 6$$

$$y = -6 + 6$$

$$y = 0$$

check:

$$y = 5(2) - 10$$

$$y = 10 - 10 = 0 \checkmark$$

## Quiz 3

Name:

Christopher Boling

Perm Number:

6085534

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

Handwritten work for problem 1:

$$\frac{383}{12} = 31 \frac{11}{12}$$

$$\frac{766}{12} = 63 \frac{11}{6}$$

$$\frac{383}{6} = 63 \frac{5}{6}$$

Other calculations shown:

$$\frac{383}{12} = 31 \frac{11}{12}$$

$$\frac{383}{6} = 63 \frac{5}{6}$$

$$\frac{766}{12} = 63 \frac{11}{6}$$

$$\frac{383}{12} = 31 \frac{11}{12}$$

$$\frac{383}{6} = 63 \frac{5}{6}$$

$$\frac{766}{12} = 63 \frac{11}{6}$$

Final answer in box:  $63 \frac{5}{6}$

- 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

$$kt^2 - p^2 + 7$$

$$(kt+p)(kt+p)$$

$$kt^2 + ktp + ktp + p^2$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$kt^2 + 2ktp + p^2 - 2p(kt+p) + 7$$

$$kt^2 + p^2 - 2p^2 + 7$$

$$kt^2 - p^2 + 7$$

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

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

$$y = 3x + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$3 = b$$

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

$$y - 6 = 3x - 3$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

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

$$y = 5x - 10$$

$$y = 5(2) - 10$$

$$y = -3x + 6$$

$$y = 0$$

 $(x, y) =$ 

$$2, 0$$

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

$$+3x$$

$$+3x$$

$$6 = 8x - 10$$

$$+10$$

$$+10$$

$$16 = 8x$$

$$\underline{x = 2}$$



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

$$y = mx + c$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

$$y - y_1 = m(x - x_1)$$

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

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

 $y =$ 

$$3x + 3$$

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

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

$$8x = 16$$

$$x = 2$$

$$y = 10 - 10$$

 $(x, y) =$ 

$$(2, 0)$$



## Quiz 3

Name:

Daniela Ramirez

Perm Number:

6163299

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \\ 10 \end{array}$$

$$\frac{10}{12} = \frac{5}{6} \quad \frac{766}{12} = 63 \frac{5}{6}$$

$$63 \frac{5}{6}$$

- 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

$$2kt^2 - 2pt^2 - 2p + 7$$

$$\begin{aligned} & (kt+p)^2 - 2p(kt+p) + 7 \\ & (k^2t^2 + p^2 + 2p(kt+p^2)) + 7 \\ & 2kt^2 + 2pt^2 - 2p + 7 \end{aligned}$$

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

$$y = mx + b$$

$$y = 3x - 5$$

$$y = 3x - 5$$

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

$$y = mx + b$$

$$y = 3x + b$$

$$\frac{6}{1} = 6$$

$$y = 3x + 6$$

$$y = 3x + 6$$

$$y = 3x + 6$$

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

y

$$\begin{array}{r} 5x - 10 = -3x + 6 \\ +3x \quad +3x \\ \hline 8x - 10 = 6 \end{array}$$

$$\begin{array}{r} 8x - 10 = 6 \\ +10 \quad +10 \\ \hline 8x = 16 \end{array}$$

$$\begin{array}{r} 8x = 16 \\ \hline 8 \quad 8 \\ \hline x = 2 \end{array}$$

$$x = 2$$

$$\begin{array}{r} 5x - 10 = 6 \\ +10 \quad +10 \\ \hline 5x = 16 \\ \frac{5x}{5} = \frac{16}{5} \quad x = \frac{16}{5} \end{array}$$

$$(x, y) = (2, 0)$$

$$y = 5(2) - 10$$

$$y = 10 - 10$$

$$y = 0$$

$$y = -3(2) + 6$$

$$y = -6 + 6$$

$$y = 0$$

## Quiz 3

Name:

Nissa Aguirre

Perm Number:

664 6624

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

$$\frac{766}{12}$$

$$63\frac{5}{6}$$

- 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

$$kt^2 + 2ktp - p^2 - 2pk + 2pt + 7$$

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

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$kt^2 + 2ktp + p^2 - 2pk + 2pt + 2p^2 + 7$$

$$kt^2 + 2ktp + 3p^2 + 2pk + 2pt + 7$$

$$kt^2 + 2ktp + p^2 - 2pk + 2pt + 2p^2 + 7$$

$$kt^2 + 2ktp - p^2 - 2pk + 2pt + 7$$

$$(kt+p)(kt+p)$$

$$kt^2 + ktp + pke + p^2$$

$$kt^2 + ktp + ktp + p^2$$

$$kt^2 + 2ktp + p^2$$

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

$$mx + b$$

$$3x + \dots$$

$$3x - 5$$

 $y =$ 

$$3x - 5$$

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

$$y = 3x + b \quad \begin{matrix} (1, 6) \\ x \ y \end{matrix}$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$3 = b$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

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

$$y = 5x - 10 \quad -3\left(\frac{x+10}{5}\right) + 6 = y$$

$$y = -3x + 6$$

$$y = 5x - 10 \quad \frac{-3x - 30}{5} + 6$$

 $(x, y) =$ 

$$-3x$$

$$x = 5y - 10$$

$$-3x - 6 + 6$$

 $\wedge$ 

$$-3x = y$$

$$\frac{x+10}{5} = \frac{5y}{5}$$

$$y = 5x - 10$$

$$\frac{y+10}{5} = x$$

## Quiz 3

Name:

Brandy Rodriguez

Perm Number:

6565634

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{72} \\ 46 \end{array}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 63 \\ \times 12 \\ \hline 126 \\ + 630 \\ \hline 756 \end{array}$$

$$383$$

$$63 \frac{5}{6}$$

$$\frac{10}{12} = \frac{5}{6}$$

$$\begin{array}{r} 1 \\ 63 \\ \times 6 \\ \hline 378 \\ + 5 \\ \hline 383 \end{array}$$

- 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

$$kt^2 - p^2 + 7$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$(kt+p)(kt+p) - 2pkt - 2p^2 + 7$$

$$kt^2 + \cancel{pkt} + \cancel{pkt} + p^2 - 2pkt - 2p^2 + 7$$

$$kt^2 + \cancel{2pkt}$$

$$kt^2 - p^2 + 7$$

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

$$y = 3x - 5 \quad y = mx + b$$

$$y = \boxed{3x - 5}$$

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

$$y = 3x + b$$

$$\begin{aligned} 6 &= 3(1) + b \\ 6 &= 3 + b \\ -3 &\quad b = 3 \end{aligned}$$

$$y = \boxed{3x + 3}$$

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

$$y = 5x - 10$$

$$y = -3x + 6$$

$$(x, y) = \boxed{(2, 0)}$$

$$\begin{array}{r} 5x - 10 = -3x + 6 \\ +3x \quad +10 \end{array}$$

$$\begin{array}{r} 8x = 16 \\ \underline{8} \quad \underline{8} \\ x = 2 \end{array}$$

$$\begin{array}{r} y = 5(2) - 10 \\ 10 - 10 \\ y = 0 \end{array}$$

$$\begin{array}{r} y = -3(2) \\ -6 + 6 \end{array}$$

## Quiz 3

Name:

Nat Alvarez

Perm Number:

2022337

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

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \\ 10 \end{array}$$

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \phantom{0} \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \\ 10 \end{array}$$

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array} \quad \begin{array}{r} 12 \\ \times 9 \\ \hline 30 \end{array}$$

$$63 \frac{5}{6}$$

- 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

7.77

$$\begin{aligned} x &= kt + p \\ x^2 - 2px + 7 &= 0 \\ -7 - 7 \end{aligned}$$

$$x^2 - 2px = -7$$

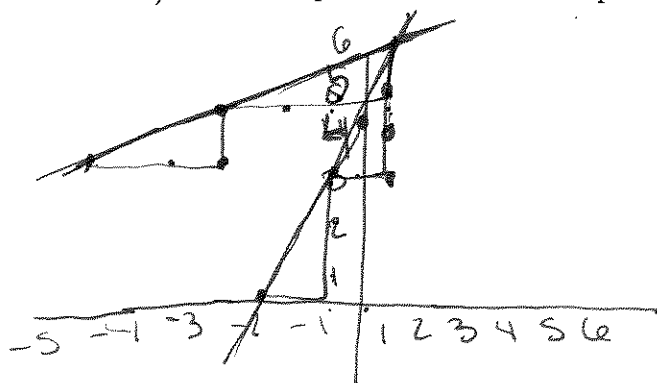
- 3) Find the equation of a line with slope  $m = 3$  and  $y$ -intercept  $b = -5$ .

$$y = mx + b$$

$$y = 3x - 5$$

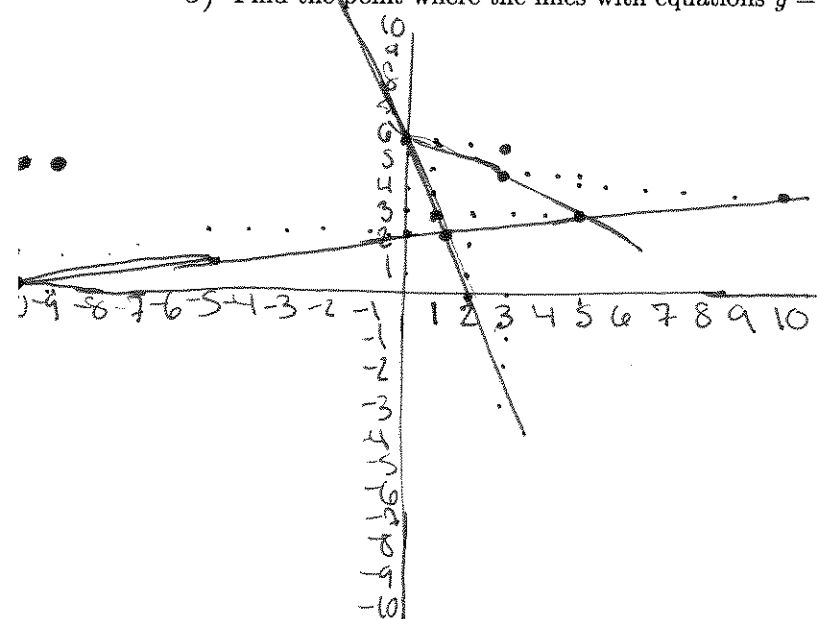
$$y = \boxed{3x - 5}$$

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



$$y = \boxed{\cancel{3x + 1} \text{ or } 3x + 5?}$$

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



$$(x, y) = \boxed{\cancel{(5, 4)} (2, 0)}$$



## Quiz 3

Name:

Alicia Cabey

Perm Number:

666 030-2

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

$$\begin{array}{r}
 63.83 \\
 12 \overline{) 766.00} \\
 \underline{-72} \phantom{00} \phantom{00} \\
 46 \phantom{00} \\
 \underline{-36} \phantom{00} \\
 100 \phantom{00} \\
 \underline{-96} \phantom{00} \\
 40 \phantom{00} \\
 \underline{-36} \phantom{00} \\
 40
 \end{array}$$

$$\frac{766}{12}$$

$$63 \frac{83}{100}$$

$$63 \frac{83}{100}$$

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

$$kt^2 - p^2 + 7$$

$$(kt + p)^2 - 2p(kt + p) + 7$$

$$(kt + p)^2 - 2pkt - 2p^2 + 7$$

$$kt^2 + 2kt + p^2 - 2pkt - 2p^2 + 7$$

$$kt^2 + p^2 - 2p^2 + 7$$

$$kt^2 - p^2 + 7$$

$$(kt + p)(kt + p)$$

$$kt^2 + kt + p + kt + p^2$$

$$kt^2 + 2kt + p + p^2$$

- $$y = mx + b$$
- $$y = 3x + (-5)$$
- $$y = 3x - 5$$

$$y = 3x - 5$$

- (1,6)

$$6 = 3(1) + b$$

$$\begin{array}{r} 6 = 3 + b \\ -3 \quad -3 \\ \hline 3 = b \end{array}$$

$$y = 3x + 3$$

- $$(x, y) =$$

## Quiz 3

Name:

Zachary Jasmine Moody

Perm Number:

4564134

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

$$\frac{766}{12}$$

$$\begin{array}{r} 1 \\ 12 \overline{) 766} \\ \underline{60} \phantom{0} \\ 12 \phantom{0} \\ \underline{12} \phantom{0} \\ 0 \end{array}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{72} \phantom{0} \\ 46 \phantom{0} \\ \underline{36} \phantom{0} \\ 10 \end{array}$$

$$63^{10/12}$$

$$63^{5/6}$$

$$63^{5/6}$$

- 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

$$kt^2 - 2pkt + 3p^2 + 7$$

$$(kt + p)^2 - 2p(kt + p) + 7$$

$$(kt + p)^2 - 2pkt + 2p^2 + 7$$

$$kt^2 + p^2 - 2pkt + 2p^2 + 7$$

$$kt^2 + (-2pkt) + 3p^2 + 7$$

$$(kt + p)^2 - 2(p(kt + p)) + 7$$

$$kt^2 + p^2 - 2(pkt + p^2) + 7$$

$$kt^2 + p^2 - 2pkt + 2p^2 + 7$$

$$kt^2 - 2pkt + 3p^2 + 7$$

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

$$y = mx + b$$

$$y = 3x - 5$$

$$y = 3x - 5$$

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

$$y = 3x + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$3 = b$$

$$y = 3x + 3$$

$$y = 3x + 3$$

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

$$y = 5x - 10$$

$$y = -3x + 6$$

$$-y \text{ also } = 0$$

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

$$+3x \quad +3x$$

$$8x - 10 = 6$$

$$+10 \quad +10$$

$$\frac{8x}{8} = \frac{16}{8}$$

$$x = 2$$

$$(x, y) = (2, 0)$$

$$y = 5(2) - 10$$

$$y = 0 \quad (?)$$

## Quiz 3

Name:

Stephane Mita

Perm Number:

8038481

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

$$\frac{766}{12}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{72} \phantom{6} \\ 46 \\ \underline{36} \\ 10 \end{array}$$

$$\begin{array}{r} 12 \\ \times 3 \\ \hline 36 \end{array}$$

$$63 \frac{10}{12} \rightarrow 63 \frac{5}{6}$$

$$\begin{array}{r} 63 \\ \times 12 \\ \hline 126 \\ + 630 \\ \hline 756 \end{array}$$

$$\frac{10}{12} = \frac{5}{6}$$

$$\begin{array}{r} 766 \\ - 756 \\ \hline 10 \end{array}$$

- 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

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

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$(kt+p)(kt+p)$$

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

$$k^2t^2 + \cancel{2kt p} + p^2 - \cancel{2kt p} - 2p^2 + 7$$

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

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

$$b = (-5, 0)$$

$$y - 0 = 3(x + 5)$$

$$y = 3x + 15$$

 $y =$ 

$$3x + 15$$

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

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

$$\begin{array}{rcl} y - 6 & = & 3x - 3 \\ + 6 & & + 6 \end{array}$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

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

$$\begin{array}{rcl} 5x - 10 & = & -3x + 6 \\ + 3x + 10 & & + 3x + 10 \end{array}$$

 $(x, y) =$ 

$$(2, 0)$$

$$\frac{8x}{8} = \frac{16}{8}$$

$$x = 2$$

Both cross @  $(2, 0)$

## Quiz 3

Name:

Octavia Hoffman

Perm Number:

0625370

$$\begin{array}{r}
 60 \cdot 12 = 720 \\
 61 \cdot 12 = 732 \\
 62 \cdot 12 = 744 \\
 63 \cdot 12 = 756
 \end{array}$$

$$\begin{array}{l}
 63 \cdot 12 = 756 \\
 \$ \text{ has } 10 \text{ left over} \rightarrow \frac{10}{12} = \frac{5}{6} \\
 63 \frac{5}{6}
 \end{array}$$

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

$$\frac{766}{12}$$

$$\begin{array}{rcl}
 10 & = & 120 \downarrow +120 \\
 20 & = & 240 \downarrow +120 \\
 30 & = & 360 \downarrow +120 \\
 40 & = & 480 \downarrow +120 \\
 50 & = & 600 \downarrow +120 \\
 60 & = & 720 \downarrow +120 \\
 61 & = & 732 \downarrow +120 \\
 62 & = & 744 \downarrow +120 \\
 63 & = & 756 \downarrow
 \end{array}$$

$$63 \frac{5}{6}$$

$$\begin{array}{c}
 10 \\
 \curvearrowright \\
 756 \rightarrow 766
 \end{array}$$

$$\frac{10}{12} = \frac{5}{6}$$

- 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

$$Kt^2 + 7 - p^2$$

$$x = kt + p \text{ into}$$

$$x = kt + p \text{ into } x^2 - 2px + 7$$

$$\begin{array}{l}
 Kt^2 + 2Ktp + p^2 - 2Ktp - 2p^2 + 7 \\
 \rightarrow Kt^2 + 7 - p^2
 \end{array}$$

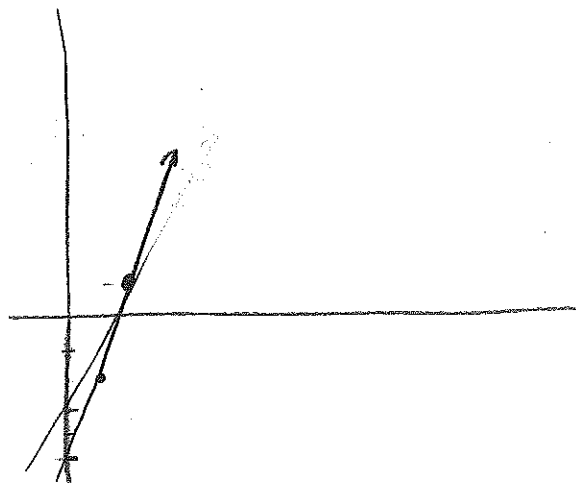
$$\begin{array}{l}
 (kt+p)^2 - 2p(kt+p) + 7 \\
 (kt+p)(kt+p) - 2p(kt+p) + 7
 \end{array}$$

$$(Kt^2 + Ktp + Ktp + p^2) - (2Ktp + 2p^2) + 7$$

distribute the minus

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

$$y = 3x - 5$$



$$y = 3x - 5$$

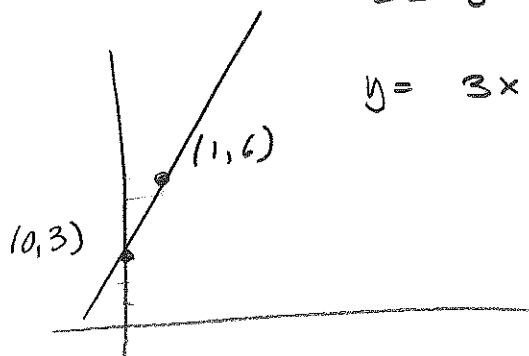
- 4) Find the equation of a line with slope  $m = 3$  passing through the point  $(1, 6)$ .

$$y = 3x + b$$

$$6 = 3 + b$$

$$b = 3$$

$$y = 3x + 3$$



$$y = 3x + 3$$

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

$$8x - 10 = 6$$

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

$$\frac{8x}{8} = \frac{16}{8}$$

$$x = 2$$

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

$$8x - 10 = 6$$

$$\frac{8x}{8} = \frac{16}{8}$$

$$x = 2$$

$$(x, y) = (2, 0)$$

$$y = 5(2) - 10$$

$$y = 0$$

✓

→

$$\text{check } y = -3(2) + 6$$

$$y = -6 + 6$$

$$y = 0$$

✓



## Quiz 3

Name:

Emily Cohen

Perm Number:

5622949

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

$$\begin{array}{r}
 12 \\
 \times 53 \\
 \hline
 36 \\
 + 600 \\
 \hline
 636
 \end{array}
 \quad
 \begin{array}{r}
 12 \\
 \times 60 \\
 \hline
 720
 \end{array}
 \quad
 \begin{array}{r}
 12 \\
 \times 62 \\
 \hline
 24 \\
 + 720 \\
 \hline
 744 \\
 + 12 \\
 \hline
 756
 \end{array}
 \quad
 \begin{array}{r}
 766 \\
 12 \\
 \hline
 63 \frac{10}{12}
 \end{array}$$

$$63 \frac{5}{6}$$

- 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

$$kt^2 - p^2 + 7$$

$$\begin{aligned}
 &(kt + p)^2 - 2p(kt + p) + 7 \\
 &kt^2 + 2ktp + p^2 - 2pkt - 2p^2 + 7 \\
 &kt^2 + p^2 - 2p^2 + 7 \\
 &kt^2 - p^2 + 7
 \end{aligned}$$

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

$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

$$y = 3x + b$$

$$6 = 3(1) + b$$

$$b = 3$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

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

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

$$8x = 16$$

$$x = 2$$

 $(x, y) =$ 

$$(2, 0)$$

$$y = 5(2) - 10$$

$$y = 0$$

Name: Annalise Evans

Perm Number: 5301023

$$\begin{array}{r} 766 \\ \hline 12 \end{array}$$

63  $\frac{5}{10}$

$$\begin{array}{r} 128 \\ \times 96 \\ \hline \end{array}$$

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array}$$

$$0.3.8333$$

$$12 \overline{) 766.00}$$

$$\begin{array}{r} 72 \downarrow \\ \hline 46 \end{array}$$

$$\begin{array}{r} 36 \downarrow \\ \hline 100 \end{array}$$

$$\begin{array}{r} 96 \downarrow \\ \hline 40 \end{array}$$

$$\begin{array}{r} 36 \downarrow \\ \hline 4 \end{array}$$

$$63 \frac{10}{12} = \frac{5}{6}$$

$$\begin{array}{r} 19 \\ 4 \overline{) 766} \\ \underline{- 4} \phantom{0} \phantom{0} \\ 36 \phantom{0} \\ \underline{- 36} \phantom{0} \\ 0 \end{array}$$

$$\begin{array}{r} 12 \\ 6 \overline{) 766} \\ \underline{-62} \phantom{0} \\ 160 \\ \underline{-120} \\ 40 \end{array}$$

$$63 \frac{10}{12} = \frac{5}{6}$$

$$\begin{array}{r} 383 \\ 2 \overline{) 766} \\ \underline{- 64} \phantom{0} \\ 160 \\ \underline{- 160} \\ 0 \end{array}$$

$$\begin{array}{r} 12 \\ 3 \overline{) 383} \\ \underline{-31} \phantom{0} \\ 08 \\ \underline{-6} \phantom{0} \\ 2 \end{array}$$

$$\begin{array}{r} 63 \\ 6 \overline{) 383} \\ \underline{36} \phantom{0} \\ 23 \\ \underline{18} \\ 5 \end{array}$$

$$\begin{array}{r} 103 \\ \times 6 \\ \hline 318 \\ + 5 \\ \hline 203 \end{array}$$

38

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

$$K^2 + 2 = p^2 + 1$$

$$(k+p)^2 - 2p(k+p) + 7$$

$$(k+p)(k+p) - 2pk + -2p^2 + 7$$

$$\cancel{k^2 + 2k + p + p^2} - \cancel{2kp} = \cancel{2p^2} + 7$$

$$K^2 + 2 - P^2 + 7$$

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

$$y = 3x - 5$$

$$y = 3x - 5$$

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

$$y = 3x + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$3 = b$$

$$y = 3x + 3$$

$$6 = 3(1) + 3$$

✓

$$y = 3x + 3$$

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

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

$$8x = 16$$

$$x = 2$$

$$(x, y) = (2, 0)$$

$$y = 5(2) - 10$$

$$y = 10 - 10$$

$$y = 0$$

$$y = -3(2) + 6$$

$$y = -6 + 6$$

$$y = 0$$

$$0 = 5(2) - 10$$

$$0 = 10 - 10 \checkmark$$

$$0 = -3(2) + 6 \checkmark$$

## Quiz 3

Name:

Sebastian Avila

Perm Number:

5976220

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

$$\begin{array}{r} 1 \\ 12 \overline{) 72} \\ \underline{72} \\ 0 \end{array}$$

$$\begin{array}{r} 62 \\ 12 \overline{) 766} \\ \underline{72} \phantom{0} \\ 46 \\ \underline{24} \\ 22 \end{array}$$

$$62 \frac{2}{12}$$

$$62 \frac{4}{6}$$

$$\frac{766}{12}$$

$$62 \frac{1}{3}$$

- 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

$$2ktk^2p^2 - p^2 + 7$$

PEMDAS

$$x = kt + p$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$\begin{array}{ccc} (kt+p)(kt+p) & & \\ k & pkt & p^2 \end{array}$$

$$\begin{array}{ccc} kt & kt & p \\ p & kt & p^2 \end{array}$$

$$-2pkt + p^2 + 7$$

$$2ktk^2t^2$$

$$2pkt p^2$$

$$\begin{array}{ccc} (xy)(xy) & & \\ x^2 & xy & y^2 \\ 2xy & x^2 & y^2 \end{array}$$

$$\begin{array}{ccc} kt & & \\ x & kt & \\ kt & t^2 & \end{array}$$

$$\begin{array}{ccc} 1 & k^2 & kt \\ k^2 & 2kt & t^2 \end{array}$$

$$\begin{array}{ccc} (kt)^2 & & -p^2 \\ (kt)(kt) & & (2x)(2x) \end{array}$$

$$\begin{array}{ccc} 4 & 2x & 2x & p^2 \\ 4 & 4x & 2x & p^2 \end{array}$$

$$2ktk^2t^2 + 2pkt + p^2 - 2pkt - p^2$$

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

$$m=3-5$$

$$3x-5$$

 $y =$ 

$$3x-5$$

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

$$3 \quad \frac{3}{1} \quad \frac{y}{x} \quad \begin{matrix} 1,6 \\ 0,3 \end{matrix}$$

$$3x+3$$

 $y =$ 

$$3x+3$$

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

$$y=5x-10 \quad y=5(2)-10=0$$

$$y=-3x+6 \quad y=-3(2)+6=0$$

$$y=-6+6$$

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

$$5x=16-3x$$

$$\frac{8x=16}{8} \quad x=2$$

 $(x, y) =$ 

$$2, 0$$

## Quiz 3

Name:

Katelyn Cole

Perm Number:

978294-7

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

$$\frac{766}{12}$$

$$63 \frac{10}{12}$$

- 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

$$kt^2 - p^2 + 7$$

$$(kt + p)^2 - 2p(kt + p) + 7$$

$$(kt + p)(kt + p)$$

$$kt^2 + kt^2 + kp + kp + p^2$$

$$kt^2 + 2kt^2 + p^2 - 2kt^2 - 2p^2 + 7$$

$$kt^2 - p^2 + 7$$

- 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  $(1, 6)$ .

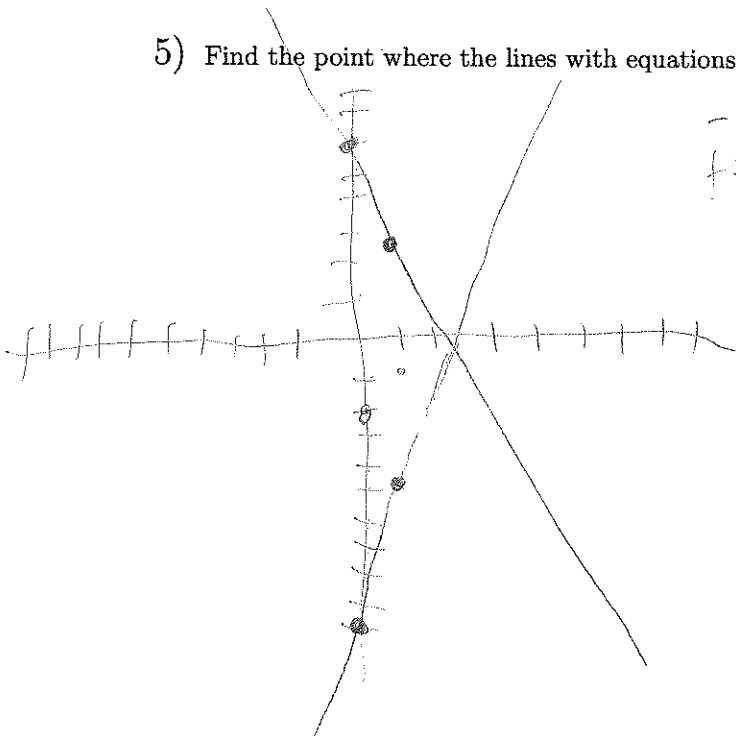
$$y - 6 = 3(x - 1)$$

$$\begin{array}{rcl} y - 6 & = & 3x - 3 \\ +6 & & +6 \end{array}$$

$$y = 3x + 3$$

$$y = 3x + 3$$

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



$$\begin{array}{rcl} -3x + 6 & = & 5x - 10 \\ +3x + 10 & + & +3x + 10 \end{array}$$

$$\frac{16}{8} = \frac{8x}{8}$$

$$(x, y) =$$

$$(2, 0)$$

$$x = 2$$

$$y = 5(2) - 10$$

$$y = 0$$

$$y = -3(2) + 6$$

$$= 0$$



## Quiz 3

Name:

Zihu Zhu

Perm Number:

5381462

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

$$\frac{766}{12}$$

$$63 \frac{5}{6}$$

- 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 →

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

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

 $y =$ 

$$3x - 5$$

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

 $y =$ 

$$3x + 3$$

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

 $(x, y) =$ 

$$(2, 0)$$

## Quiz 3

Name:

Erick Castillo

Perm Number:

5900857

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

$$\frac{766}{12}$$

$$63\frac{10}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-720} \\ 46 \\ \underline{-36} \\ 10 \end{array} \quad \begin{array}{r} 12 \quad 72 \\ 24 \\ 36 \\ 48 \\ 60 \end{array} \quad \begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-126} \\ 630 \\ \underline{-560} \\ 110 \\ \underline{-766} \end{array}$$

- 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

$$kt + p \quad (kt + p)^2 - 2p(kt + p) + 7$$

$$q^{-1} \quad \frac{2}{kt+p} - 2p(kt+p)$$

$$\frac{2}{kt+p} - 2pkt - 2p$$

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

$$y = mx + b \quad \frac{y^2 - y^1}{x^2 - x^1} = m \quad \begin{matrix} x^1 & y^1 \\ (3, 0) \end{matrix} \quad \begin{matrix} x^2 & y^2 \\ (0, -5) \end{matrix}$$

$$m = -\frac{5}{3}$$

$$y = mx + b$$

$$\begin{aligned} -5 &= \frac{5}{3}(0) + b \\ +\frac{5}{3} + \frac{5}{3} & \\ -6\frac{2}{3} &= b \end{aligned}$$

$$\frac{-5 - (-0)}{0 - 3} = \frac{5}{-3}$$

$$y = \boxed{-\frac{5}{3}x - 6\frac{2}{3}}$$

$$y = -\frac{5}{3}x - 6\frac{2}{3}$$

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

$$y = mx + b \quad \frac{y^2 - y^1}{x^2 - x^1} = m \quad \begin{matrix} x^1 & y^1 \\ (3, 0) \end{matrix} \quad \begin{matrix} x^2 & y^2 \\ (1, 6) \end{matrix}$$

$$y = \boxed{3x + 3}$$

$$\frac{6 - 0}{1 - 3} = \frac{6}{-2} = -3$$

$$6 = 3(1) + b$$

$$y = 3x + 3$$

$$\begin{aligned} 6 &= 3 \\ -3 & \\ b &= 3 \end{aligned}$$

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

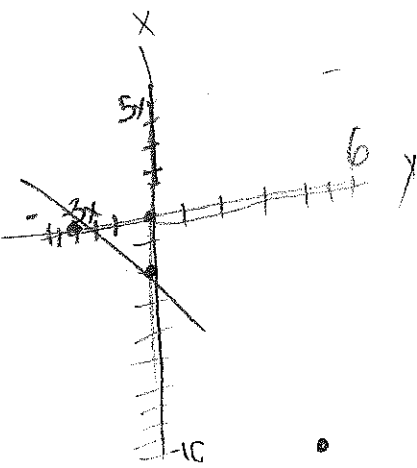
$$y = 5x - 10$$

$$y = -3x + 6$$

$$\frac{6 - (-10)}{-3 - 5} = \frac{16}{-8} = -2$$

$$(x, y) =$$

$$\boxed{(2, 2)}$$



$$\frac{y}{5} = \frac{5x - 10}{5} \quad y = -3x + 6$$

$$y - 6 = -3x$$

$$\frac{x + 10}{5} = \frac{5x}{5} \quad x = 2 \quad y = 2$$

## Quiz 3

Name:

Odalys Ordaz

Perm Number:

6065536

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766.0} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \phantom{0} \\ 10 \\ \underline{-12} \phantom{0} \\ -2 \phantom{0} \\ \underline{+6} \phantom{0} \\ 12 \\ \underline{-12} \\ 0 \end{array}$$

$$63 \frac{10}{12} \div 2 = 63 \frac{5}{6}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 63 \\ \times 12 \\ \hline 126 \\ 630 \\ \hline 756 \end{array}$$

- 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

$$kt^2 + 3p^2 - 2pkt + 7$$

$$\begin{aligned} (kt+p)^2 - 2p(kt+p) + 7 \\ kt^2 + p^2 - 2pkt + 2p^2 + 7 \\ kt^2 + 3p^2 - 2pkt + 7 \end{aligned}$$

$m = \text{slope}$  $b = y \text{ intercept}$ 

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

$$y = 3x - 5$$

$$y = \boxed{3x - 5}$$

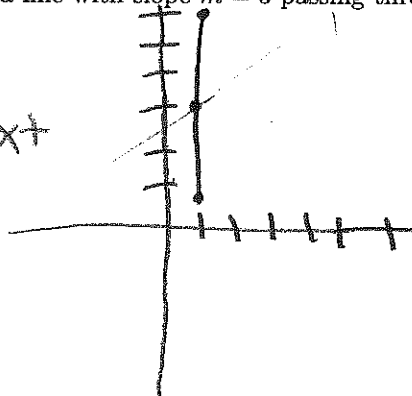
- 4) Find the equation of a line with slope  $m = 3$  passing through the point  $(1, 6)$ .

 $y/x$ 

$$\frac{6}{1} - \frac{3}{1} = \frac{3}{1}$$

 $(1, 3)$ 

$$y = 3x +$$

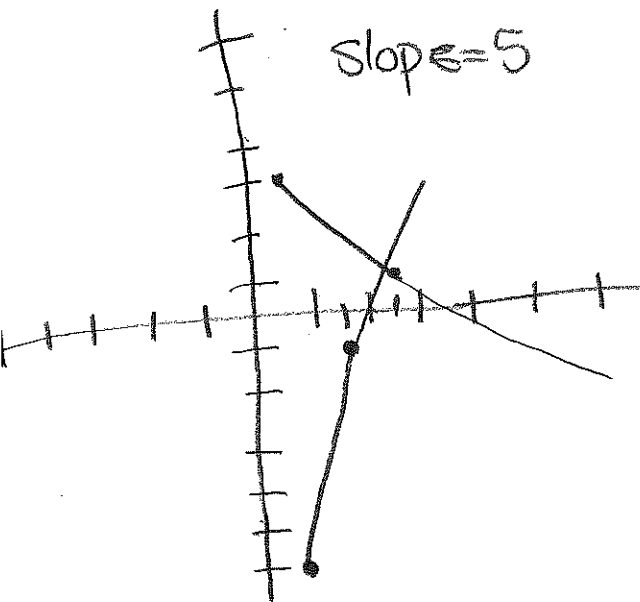


$$y = \boxed{3x + 1}$$

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

 $\text{slope} = 5$ 

$$(x, y) = \boxed{(4, 2)}$$



## Quiz 3

Name:

Natasha Gavriloff

Perm Number:

677-311-3

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

$$\frac{766}{12}$$

$$\begin{array}{r} 0.63 \\ 12 \overline{) 766} \\ \underline{- 72} \phantom{0} \\ 46 \\ \underline{- 36} \\ 10 \\ \underline{- 12} \end{array}$$

$$63 \frac{10}{12}$$

$$63 \frac{5}{6}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 12 \\ \times 63 \\ \hline 36 \\ 720 \\ \hline 756 \\ + 10 \\ \hline 766 \end{array} \checkmark$$

- 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

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

$$kt^2 + 3p^2 - 2pkt + 7$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$kt^2 + p^2 - 2pkt + 2p^2 + 7$$

$$kt^2 + 3p^2 - 2pkt + 7$$

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

$$y = 3x - 5$$

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

~~too~~  $y = mx + b$

$$6 = (3)(1) + b$$

$$6 = 3 + b$$

$$-3 \quad -3$$

$$3 = b$$

$$y = 3x + 3$$

$$y = 3x + 3$$

$$6 = 3(1) + 3$$

$$6 = 3 + 3 \quad 6 = 6 \quad \checkmark$$

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

$$\begin{array}{r} 5x - 10 = -3x + 6 \\ + 3x \quad \quad + 3x \end{array}$$

$$8x - 10 = 6$$

$$+10 \quad +10$$

$$8x = 16$$

$$\underline{\quad 8 \quad}$$

$$x = 2$$

$$(2, 0)$$

$$(x, y) = (2, 0)$$

$$y = 5(2) - 10$$

$$y = 0$$

$$y = -3x + 6$$

$$0 = -3(2) + 6$$

$$0 = -6 + 6$$

$$0 = 0 \quad \checkmark$$



## Quiz 3

Name:

Chloe Stewart

Perm Number:

452144-9

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63.08 \\ 12 \overline{) 766} \\ \underline{- 720} \phantom{0} \\ 46 \phantom{0} \\ \underline{- 36} \phantom{0} \\ 100 \phantom{0} \\ \underline{- 96} \phantom{0} \\ 4 \phantom{0} \end{array}$$

63

$$63 \frac{10}{12} = 63 \frac{5}{6}$$

63  $\frac{5}{6}$ 

check:

$$\begin{array}{r} 388 \\ 2 \overline{) 766} \\ \underline{- 64} \phantom{0} \\ 16 \phantom{0} \end{array}$$

$$\begin{array}{r} 199 \\ 2 \overline{) 388} \\ \underline{- 64} \phantom{0} \\ 1 \phantom{0} \end{array}$$

$$\frac{388}{6}$$

=

$$\frac{199}{3}$$

$$\begin{array}{r} 66 \\ 3 \overline{) 198} \\ \underline{- 18} \phantom{0} \\ 18 \phantom{0} \\ \underline{- 18} \phantom{0} \\ 0 \phantom{0} \end{array}$$

- 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

$$kt^2 - p^2 + 7$$

$$(kt + p)^2 - 2p(kt + p) + 7$$

$$p^2 + kt^2 + \cancel{2ktp} - \cancel{2ktp} - 2p^2 + 7$$

$$(kt + p)(kt + p)$$

$$kt^2 + 2ktp + p^2$$

$$kt^2 - p^2 + 7$$

check:

$$(kt + p)(kt + p)$$

$$kt^2 + ktp + ktp + p^2$$

$$kt^2 + \cancel{2ktp} + p^2 - \cancel{2ktp} - 2p^2 + 7$$

cancel

cancel

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



$$y = mx + b$$

$$y = (3)(0) - 5$$

$$-5 =$$

num all info given

$$y = 3x - 5$$

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

$$y = mx + b$$

$$6 = (3)(1) + b$$

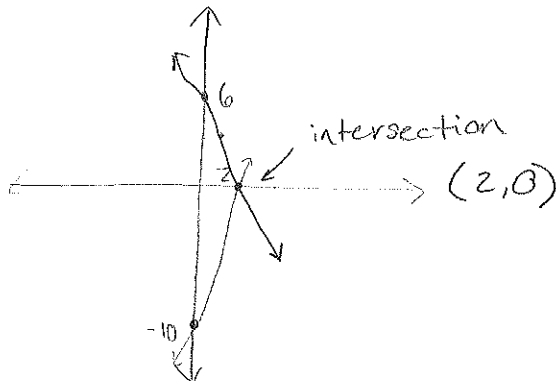
$$6 = 3 + b$$

$$b = 3$$

$$b = 3 \rightarrow y = 3x + 3$$

$$y = 3x + 3$$

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



$$\begin{aligned} 0 &= 5x - 10 \\ 10 &= 5x \\ 2 &= x \end{aligned}$$

$$\begin{aligned} 0 &= -3x + 6 \\ -6 &= -3x \\ 12 &= x \end{aligned}$$

$$(x, y) = (2, 0)$$

## Quiz 3

Name:

Rebekka Kabel

Perm Number:

5084769

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

$$\frac{766}{12}$$

$$63\frac{10}{12} = 63\frac{5}{6}$$

$$63\frac{5}{6}$$

- 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

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

$$x = kt + p$$

$$\begin{aligned} & (kt + p)^2 - 2p(kt + p) + 7 \\ & \left( \cancel{k^2t^2} + \cancel{2pkt} + \cancel{p^2} \right) + \left( \cancel{-2pkt} - \cancel{p^2} \right) + 7 \\ & k^2t^2 - p^2 + 7 \end{aligned}$$

	$kt$	$p$
$kt$	$k^2t^2$	$pkt$
$p$	$pkt$	$p^2$

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

$$y = 3x + b \quad y = 3x - 5 \quad (0, -5)$$

$$y = 3x - 5$$

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

$$y = 3x + b \quad (1, 6)$$

$$6 = 3 + b$$

$$b = 3$$

$$y = 3x + 3$$

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

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

$$8x = 16$$

$$x = 2$$

$$y = 5(2) - 10 = 0$$

$$y = -3(2) + 6 = 0$$

$$5(2) - 10 = -3(2) + 6$$

$$10 - 10 = -6 + 6$$

$$0 = 0 \checkmark$$

$$(x, y) = (2, 0)$$

## Quiz 3

Name:

Samantha Steveni

Perm Number:

5113980

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{72} \phantom{0} \\ 46 \\ \underline{-36} \\ 10 \end{array}$$

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array}$$

$$63 \frac{10}{12} \quad 63 \frac{5}{6}$$

$$63 \frac{5}{6}$$

- 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

$$kt^2 - p^2 + 7$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$(kt+p)(kt+p)$$

$$kt^2 + kt p + kt p + p^2$$

$$kt^2 + \cancel{2kt p} + p^2 - 2kt p - 2p^2 + 7$$

$$kt^2 - p^2 + 7$$

$$-2p(kt+p) + 7$$

$$-2kt p - 2p^2 + 7$$

$$(kt+p)(kt+p)$$

$$kt^2 + kt p + kt p + p^2$$

$$kt^2 + 2kt p + p^2$$

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

$$kt^2 + 2kt p + p^2 - 2kt p - 2p^2$$

$$kt^2 + p^2 - 2p^2 = kt^2 - p^2 + 7$$

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

$$y = mx + b$$

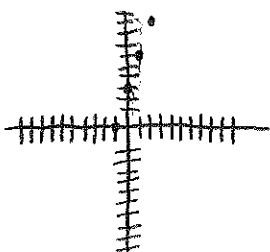
$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

$$y = mx + b$$



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

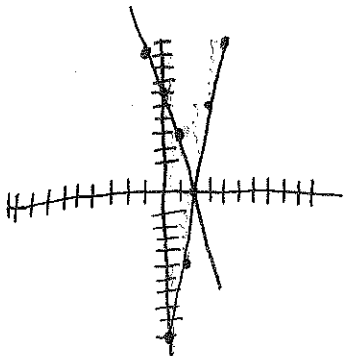
$$y - 6 = 3x - 3$$

$$+6 \quad +6$$

$$y = 3x + 3$$

$$3x + 3$$

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



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

$$+3x \quad +3x$$

$$8x - 10 = 6$$

$$+10 \quad +10$$

$$(x, y) =$$

$$8x = 16$$

$$x = 2$$

$$(2, 0)$$

$$y = -3(2) + 6 = -6 + 6$$

$$y = 0$$

## Quiz 3

Name:

Max Levin

Perm Number:

4984886

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

$$\frac{766}{12}$$

$$64\frac{2}{3}$$

$$12 \overline{) 766} \begin{array}{r} 64 \\ 72 \\ \hline 46 \end{array}$$

3

$$63\frac{5}{6}$$

$$64\frac{66}{72}$$

$$63 \times 12$$

$$12 \overline{) 766} \begin{array}{r} 63 \\ 72 \\ \hline 46 \\ 36 \\ \hline 10 \end{array}$$

$$63\frac{10}{12} \quad 63\frac{5}{6}$$

- 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

$$kt^2 + ktp^2 - 2kpt + 7$$

$$(kt + p)^2 - 2p(kt + p) + 7$$

$$(kt + p)(kt + p)$$

$$kt^2 + ktp + ktp + p^2$$

$$kt^2 + ktp^2 + p^2 - 2kpt - 2p^2 + 7$$

$$kt^2 + ktp^2 - 2kpt + 7$$

$$-2kpt - 2p^2 + 7$$

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

$$y = mx + b$$

$$y = 3x - 5$$

$$y = \boxed{3x - 5}$$

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

$$y = 3(1) + b$$

$$y = 3 + b$$

$$y = \boxed{3 + b}$$

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

$$y = 5x - 10$$

$$y = -3x + 6$$

$$y = 5(2) - 10$$

$$y = 10 - 10$$

$$0 = 5(2) - 10$$

$$0 = 10 - 10$$

$$(x, y) = \boxed{2, 0}$$

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

$$\frac{-3x}{-3} = \frac{5x - 10}{-3}$$

$$x = 2$$

$$x = \frac{-3x}{-3} = \frac{5x - 10}{-3}$$

$$-8x = -10$$



## Quiz 3

Name:

Sean Andampou V

Perm Number:

6120505

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

$$\begin{array}{r} 63 \frac{10}{12} \\ 12 \overline{) 766} \\ \underline{72} \phantom{00} \\ 46 \phantom{00} \\ \underline{36} \phantom{00} \\ 10 \end{array}$$

$$\begin{array}{r} 63 \frac{10}{12} \\ 12 \overline{) 766} \\ \underline{72} \phantom{00} \\ 46 \phantom{00} \\ \underline{36} \phantom{00} \\ 10 \end{array}$$

$$\boxed{63 \frac{10}{12}} \downarrow \boxed{63 \frac{5}{6}}$$

$$63 \frac{5}{6}$$

- 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

$$kt^2 - p^2 + 7$$

$$(kt + p)^2 - 2p(kt + p) + 7$$

$$(kt + p)(kt + p)$$

$$kt^2 + kt p + kt p + p^2$$

$$kt^2 + 2kt p + p^2$$

$$-2p(kt + p)$$

$$-2kt p - 2p^2 + 7$$

$$kt^2 - p^2 + 7$$

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

$$y - y_1 = m(x - x_1)$$

$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$3 = b$$

 $y =$ 

$$3x + 3$$

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

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

$$8x = 16$$

$$x = 2$$

 $(x, y) =$ 

$$(2, 0)$$

$$y = 10 - 10 = 0$$

## Quiz 3

Name:

Colin Gallivan

Perm Number:

5862735

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

$$\frac{766}{12} = 12 \cdot 60 \frac{766}{12}$$

$$\begin{array}{r} 12 \\ 60 \\ \hline 00 \end{array}$$

$$\begin{array}{r} 720 \\ 12 \\ \hline 732 \end{array} \quad 61$$

$$\begin{array}{r} 732 \\ 12 \\ \hline 744 \end{array} \quad 62$$

$$\begin{array}{r} 744 \\ 12 \\ \hline 756 \end{array}$$

$$\begin{array}{r} 63 \\ 12 \\ \hline 126 \end{array}$$

$$\begin{array}{r} 126 \\ 630 \\ \hline 756 \end{array}$$

$$\begin{array}{r} 62 \\ 12 \\ \hline 124 \end{array}$$

$$\begin{array}{r} 124 \\ 620 \\ \hline 744 \end{array}$$

$$63 \frac{5}{6}$$

$$63 \frac{10}{12} \Rightarrow 63 \frac{5}{6}$$

$$\begin{array}{r} 62 \\ 12 \\ \hline 124 \end{array}$$

$$\begin{array}{r} 124 \\ 620 \\ \hline 744 \end{array}$$

$$\begin{array}{r} 12 \\ 756 \\ \hline \end{array}$$

$$756 = 12 \cdot 63$$

- 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

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

$$(kt + p)^2 - 2p(kt + p) + 7$$

$$(kt + p)(kt + p) - 2p(kt + p) + 7$$

$$(k^2t^2 + ktp + ktp + p^2) - 2ktp - 2p^2 + 7$$

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

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

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

$$y = \boxed{3x - 5}$$

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

$$\begin{aligned} 6 &= 3(1) + b \\ -3 &-3 \\ 3 &= b \end{aligned}$$

$$y = \boxed{3x + 3}$$

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

$$\begin{aligned} -3x + 6 &= 5x - 10 \\ +3x + 10 &+3x + 10 \end{aligned}$$

$$\frac{16}{8} = \frac{8x}{8}$$

$$x = 2$$

$$(x, y) = \boxed{(2, 0)}$$

$$y = 5(2) - 10$$

$$y = 0$$

## Quiz 3

Name:

Kellen Beckett

Perm Number:

479 466-5

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

$$\frac{766}{12}$$

$$63\frac{10}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{112} \phantom{0} \\ 560 \\ \underline{560} \\ 0 \end{array}$$

$$63\frac{5}{6}$$

$$\begin{array}{r} 63 \\ 6 \overline{) 378} \\ \underline{378} \\ 0 \end{array}$$

$$\begin{array}{r} 383 \\ 6 \overline{) 2298} \\ \underline{2280} \\ 18 \end{array}$$

- 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 →

$$kt^2 - p^2 + 7$$

$$\begin{aligned} (kt+p)^2 - 2p(kt+p) + 7 \\ kt^2 + p^2 - 2p(kt+p) + 7 \\ -2kpt - p^2 + kt^2 + 7 \end{aligned}$$

$$\begin{aligned} (kt+p)(kt+p) \\ kt^2 + ktp + kpt + p^2 \\ -2kpt - p^2 + 7 \end{aligned}$$

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

$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

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

$$y - 6 = 3x - 3$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

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

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

$$7x = 16$$

$$x = 2$$

$$y = 0$$

 $(x, y) =$ 

$$2, 0$$

## Quiz 3

Name:

Hidei Spanke

Perm Number:

5958525

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \phantom{0} \\ 10 \\ \underline{-6} \phantom{0} \\ 4 \end{array}$$

$$63\frac{1}{3}$$

$$\begin{array}{r} 12 \\ \times 3 \\ \hline 36 \end{array}$$

$$\frac{4}{12} = \frac{2}{6} = \frac{1}{3}$$

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array} \quad \begin{array}{r} 12 \\ \times 3 \\ \hline 36 \end{array}$$

- 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

$$kt^2 - p^2 + 7$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$(kt+p)(kt+p)$$

$$kt^2 + ktp + ktp + p^2 - 2pk - 2p^2 + 7$$

$$kt^2 + 2ktp - p^2 + 7 - 2pk$$

$$\begin{aligned} &(kt+p)(kt+p) - 2p(kt+p) + 7 \\ &kt^2 + pkt + pnt + p^2 - 2pkt - 2p^2 + 7 \\ &kt^2 + 2ktp - p^2 + 7 \end{aligned}$$

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

$$y = 3x - 5 \quad \leftarrow \text{woman seems 2 easy} =$$

$$y = \boxed{3x - 5}$$

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

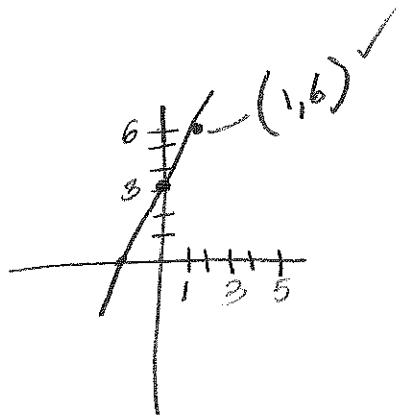
$$y = 3x + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$3 = b$$

$$3 = b$$



$$y = \boxed{y = 3x + 3}$$

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

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

$$y = 5\left(\frac{2}{3}\right) - 10$$

$$\frac{5}{1} \cdot \frac{2}{3} = \frac{10}{3}$$

$$5x = -3x + 4$$

$$y = \frac{10}{3} - 10(x, y) =$$

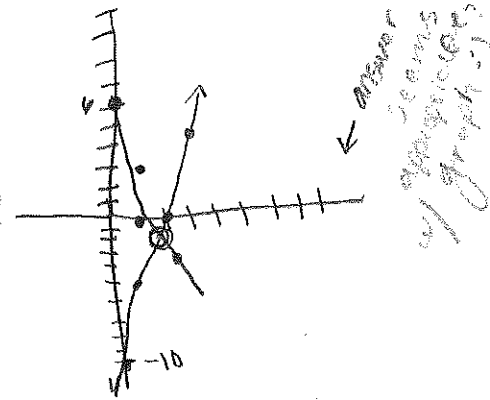
$$\boxed{\left(\frac{2}{3}, -\frac{20}{3}\right)}$$

$$\frac{4x}{4} = \frac{4}{6}$$

$$x = \frac{2}{3}$$

$$\frac{10}{3} - \frac{10}{1.5}$$

$$\frac{10}{3} - \frac{30}{3} = -\frac{20}{3}$$





## Quiz 3

Name:

Mariah Ford

Perm Number:

6144893

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

$$\frac{766}{12}$$

$$\begin{array}{r} 60 \times 12 = 720 \\ + 12 \\ \hline 732 \\ + 12 \\ \hline 744 \\ + 12 \\ \hline 756 \end{array}$$

$$63 \frac{756}{766}$$

$$63 \frac{756}{766}$$

$$\begin{array}{r} 63 \\ 12 \\ \hline 1260 \\ 630 \\ \hline 756 \end{array}$$

- 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

$$kt^2 - p^2 + 7$$

$$\cancel{(kt + p)^2 - 2p(kt + p) + 7}$$

$$2p(kt + p) + 7$$

$$\cancel{kt^2 + p^2 - 2pkt - 2p^2 + 7}$$

$$2pkt + 2p^2 + 7$$

$$\cancel{kt^2 - 2pkt - p^2 + 7}$$

$$(kt + p)(kt + p) = \cancel{kt^2 + p^2 + 2pkt} - \cancel{2pkt} - 2p^2 + 7$$

$$kt^2 - p^2 + 7$$

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

$$y = 3x + (-5)$$

 $y =$ 

$$3x - 5$$

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

$$y - y_1 = m(x - x_1)$$

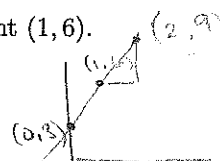
$$y - 6 = 3(x - 1)$$

$$y - 6 = 3x - 3$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$



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

$$5x - 10 = -3x + 6 \quad (2, 0)$$

$$8x = 16$$

$$x = 2$$

 $(x, y) =$ 

$$(2, 0)$$

$$y = 5(2) - 10$$

$$y = 10 - 10$$

$$y = 0$$

$$y = -3(2) + 6$$

$$y = -6 + 6$$

$$y = 0$$



## Quiz 3

Name:

Toha Hossain

Perm Number:

5757406

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63.8\overline{33} \\ 12 \overline{) 766.600} \\ \underline{72} \phantom{0} \\ 46 \phantom{0} \\ \underline{36} \phantom{0} \\ 100 \phantom{0} \\ \underline{96} \phantom{0} \\ 340 \\ \underline{36} \\ 40 \end{array}$$

$$63 \frac{40}{12}$$

$$63 \frac{10}{3}$$

$$63 \frac{10}{3}$$

$$40 \frac{63}{12}$$

$$\begin{array}{r} 63 \\ \times 12 \\ \hline 126 \\ 63 \times \\ \hline 756 \\ + 40 \\ \hline 796 \end{array}$$

$$\begin{array}{r} 63 \\ \times 12 \\ \hline 126 \\ 63 \times \\ \hline 756 \\ + 40 \\ \hline 796 \end{array}$$

$$\begin{array}{r} 40 \\ \times 12 \\ \hline 80 \\ 40 \times \\ \hline 1480 \\ + 63 \\ \hline 543 \end{array}$$

- 2) Substitute  $x = kt + p$  into

$$(kt+p)(kt+p)$$

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

Simplify the result as much as possible.

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

$$k^2t^2 + 4ktp + 3p^2 + 7$$

$$(kt+p)^2 + 2p(kt+p) + 7$$

$$k^2t^2 + 2ktp + p^2 + 2pkt + 2p^2 + 7$$

$$k^2t^2 + 4ktp + 3p^2 + 7$$

$$k^2t^2 + \underline{ktp} + \underline{ktp} + p^2 + \underline{2ktp} + 2p^2 + 7$$

$$k^2t^2 + 4ktp + 3p^2 + 7$$

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

$$y = 3x - 5$$

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

$$y = mx + b$$

$$y = 3x + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$3 = b$$

$$y = 3(1) + 3$$

$$3 + 3$$

$$y = 6$$

$$y = 3x + 3$$

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

$$\begin{array}{r} 5x - 10 = -3x + 6 \\ +3x \quad +10 \quad +3x \quad +10 \\ \hline 8x = 16 \end{array}$$

$$\frac{8x}{8} = \frac{16}{8}$$

$$x = 2$$

$$y = 5(2) - 10$$

$$y = 10$$

$$y = -10$$

$$\begin{array}{r} 0 = 5x - 10 \\ +10 \quad +10 \\ \hline 10 = 5x \end{array}$$

$$y = 5(2) - 10$$

$$10 - 10$$

$$y = 0$$

$$y = -3(2) + 6$$

$$-6 + 6$$

$$0 = -3(x) + 6$$

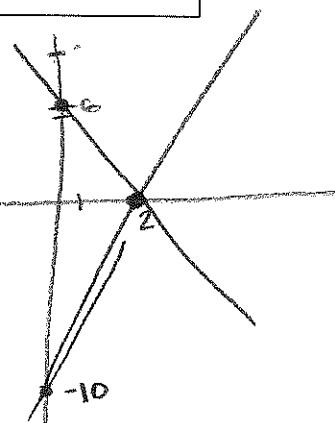
$$-6 = -3x \quad +12$$

$$(x, y) = (2, 0)$$

$$y = -3(2) + 6$$

$$-6$$

$$y = 0$$



## Quiz 3

Name:

Vivian de Waart

Perm Number:

5177530

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

$$\frac{766}{12}$$

$$12 \overline{) 766} \quad \frac{10}{12} = \frac{2}{2} = \frac{5}{6}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \\ 10 \end{array}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array} \quad \begin{array}{r} 12 \\ \times 3 \\ \hline 36 \end{array}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 12 \\ \times 7 \\ \hline 84 \end{array}$$

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array}$$

12

$$12 \overline{) 766}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \\ 10 \end{array}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 63 \\ \times 6 \\ \hline 378 + 5 = 383 \end{array}$$

- 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

$$kt^2 - p^2 + 7$$

$$(kt + p)^2 - 2p(kt + p) + 7$$

$$(kt + p)(kt + p)$$

$$(kt^2 + kt p + kt p + p^2) - 2p kt - 2p^2 + 7$$

$$kt^2 + \cancel{2kt p} + p^2 - \cancel{2p kt} - 2p^2 + 7 \rightarrow -2p kt - 2p^2 \rightarrow +7$$

$$kt^2 - p^2 + 7$$

$$kt^2 + \cancel{2kt p} + p^2 - \cancel{2p kt} - 2p^2 + 7$$

$$kt^2 - p^2 + 7$$

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

$$y = mx + b$$

↓

$$y = 3x - 5$$

$$y = \boxed{3x - 5}$$

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

$$y = 3x + b$$

↓

$$6 = 3(1) + b$$

$$b = 3$$

$$y = \boxed{3x + 3}$$

$$\rightarrow y = 3x + 3$$

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

$$y = 5x - 10$$

$$y = -3x + 6$$

$$(x, y) = \boxed{(2, 0)}$$

$$\cancel{y} \quad 5x - 10 = -3x + 6$$

$$8x = 16$$

$$x = 2$$

$$y = 5(2) - 10$$

$$y = 0$$

check

$$y = -3(2) + 6$$

$$y = 0$$

## Quiz 3

Name:

Ray Hernandez

Perm Number:

5714902

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

$$\frac{12}{4}$$

$$\begin{array}{r} \times 63 \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \\ 10 \end{array}$$

$$\frac{766}{12}$$

$$63 \frac{10}{12}$$

$$63 \frac{5}{6}$$

$$63 \frac{5}{6}$$

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

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

$$(kt + p)^2 - 2p(kt + p) + 7$$

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

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

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

$$y = \boxed{3x - 5}$$

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

$$6 = 3(1) + b$$

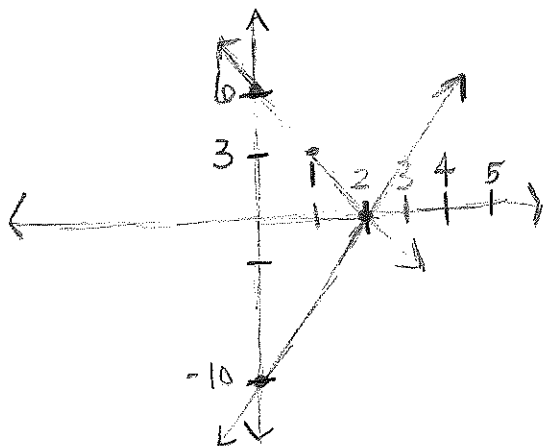
$$6 = 3 + b$$

$$-3 \quad -3$$

$$3 = b$$

$$y = \boxed{3x + 3}$$

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



$$(x, y) = \boxed{(2, 0)}$$

$$y = 5(2) - 10$$

$$y = 10 - 10$$

$$y = 0$$

$$y = -3(2) + 6$$

$$y = -6 + 6$$

$$y = 0$$



## Quiz 3

Name:

Paola Salazar

Perm Number:

6515894

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

$$\frac{766}{12}$$

$$63\frac{1}{5}$$

$$\begin{array}{r} 12 \overline{) 766} \\ 36 \phantom{0} \\ \underline{12} \phantom{0} \\ 40 \phantom{0} \\ \underline{36} \phantom{0} \\ 40 \phantom{0} \\ \underline{36} \phantom{0} \\ 40 \phantom{0} \\ \underline{36} \phantom{0} \\ 40 \phantom{0} \\ \underline{36} \phantom{0} \\ 40 \phantom{0} \end{array}$$

$$\frac{2}{10} = \frac{1}{5}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 63} \\ 12 \phantom{0} \\ \underline{12} \phantom{0} \\ 0 \phantom{0} \end{array}$$

- 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

$$-2pkt + kt - p^2 + 7$$

$$kt + p^2 - 2p(kt + p) + 7$$

$$kt + (p^2) - 2pkt - (2p^2) + 7$$

$$-2pkt - p^2 + kt + 7$$

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

$$y = mx + b$$

$$0 = 3(x) + -5$$

$$+5 \quad +5$$

$$\frac{5}{3} = \frac{3x}{3}$$

$$x = \frac{5}{3}$$

$$y = 3x + (-5)$$

$$y = 3\left(\frac{5}{3}\right) + -5$$

$$y = 3(x) + (-5)$$

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

$$y = mx + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$-3 \quad -3$$

$$3 = b$$

$$y = 3x + 3$$

$$y = 3x + 3$$

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

$$y = 5x - 10$$

$$y = -3x + 6$$

$$(x, y) = (2, -4)$$

## Quiz 3

Name:

Sophia (Yuehan) Pan

Perm Number:

6463467

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

$$\begin{array}{r} 1 \phantom{00} \\ 12 \overline{) 766} \\ \underline{72} \phantom{00} \\ 46 \phantom{00} \\ \underline{36} \phantom{00} \\ 10 \phantom{00} \end{array}$$

$$\frac{766}{12}$$

$$63 \frac{10}{12}$$

$$63 \frac{5}{6}$$

✓

$$\begin{array}{r} 63 \\ 12 \overline{) 756} \\ \underline{72} \phantom{00} \\ 36 \phantom{00} \\ \underline{36} \phantom{00} \\ 0 \phantom{00} \end{array}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 756} \\ \underline{72} \phantom{00} \\ 36 \phantom{00} \\ \underline{36} \phantom{00} \\ 0 \phantom{00} \end{array}$$

$$\begin{array}{r} 1 \phantom{00} \\ 63 \overline{) 756} \\ \underline{63} \phantom{00} \\ 126 \phantom{00} \\ \underline{126} \phantom{00} \\ 0 \phantom{00} \end{array}$$

$$\begin{array}{r} 1 \phantom{00} \\ 12 \overline{) 766} \\ \underline{12} \phantom{00} \\ 64 \phantom{00} \\ \underline{60} \phantom{00} \\ 46 \phantom{00} \\ \underline{36} \phantom{00} \\ 10 \phantom{00} \end{array}$$

$$\frac{766}{12} = 63 \frac{10}{12} = 63 \frac{5}{6}$$

$$\begin{array}{r} 378 \\ 6 \overline{) 378} \\ \underline{36} \phantom{00} \\ 18 \phantom{00} \\ \underline{18} \phantom{00} \\ 0 \phantom{00} \end{array}$$

$$\begin{array}{r} 378 \\ 6 \overline{) 378} \\ \underline{36} \phantom{00} \\ 18 \phantom{00} \\ \underline{18} \phantom{00} \\ 0 \phantom{00} \end{array}$$

- 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.

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

$$\begin{aligned} & (kt+p)^2 - 2p(kt+p) + 7 \\ &= k^2t^2 + 2ktp + p^2 - 2ktp - 2p^2 + 7 \\ &= k^2t^2 - p^2 + 7 \end{aligned}$$

✓

$$\begin{aligned} & (kt+p)^2 - 2p(kt+p) + 7 \\ &= k^2t^2 + 2ktp + p^2 - 2ktp - 2p^2 + 7 \\ &= k^2t^2 - p^2 + 7 \end{aligned}$$

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

$$y = 3x - 5$$

$$y = \boxed{3x - 5}$$



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

$$y = 3x + b$$

$$3 + b = 6$$

$$b = 3$$

$$y = 3x + 3$$

$$y = \boxed{3x + 3}$$

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

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

$$8x = 16$$

$$x = 2$$

$$y = 0$$

$$(x, y) = \boxed{(2, 0)}$$



## Quiz 3

Name:

Jessica Amezcua

Perm Number:

5714381

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

$$\frac{766}{12}$$

$$63\frac{5}{6}$$

$$\frac{10}{12} = \frac{5}{6}$$

63.

$$\frac{12}{3}$$

63

$$\frac{1}{10}$$

$$\frac{83}{100}$$

$$5\sqrt{6}$$

$$\frac{12}{3} = 4$$

$$\frac{12}{8} = \frac{3}{2}$$

$$\begin{array}{r} 63.83 \\ 12 \overline{) 766.00} \\ \underline{72} \phantom{00} \\ 46 \phantom{00} \\ \underline{36} \phantom{00} \\ 10.00 \\ \underline{96} \phantom{00} \\ 40 \phantom{00} \\ \underline{36} \phantom{00} \\ 4 \end{array}$$

- 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

$$k^2t^2 + 3p^2 - 2pkt + 7$$

$$(kt + p)^2 - 2p(kt + p) + 7$$

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

$$k^2t^2 + 3p^2 - 2pkt + 7$$

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

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

- 4) Find the equation of a line with slope  $m = 3$  passing through the point  $\overset{x}{(1, \overset{y}{6})}$ .

$$y = 3x + b$$

$$6 = 3 + b$$

$$b = 3$$

 $y =$ 

$$3x + 3$$

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

$$y = 5x - 10$$

$$y = -3x + 6$$

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

$$8x = 16$$

$$x = 2$$

$$5(2)$$

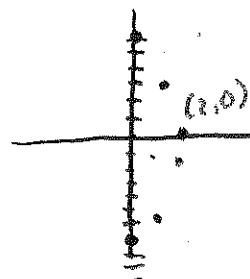
 $\downarrow$ 

$$y = 10 - 10$$

$$y = 0$$

 $(x, y) =$ 

$$(2, 0)$$



## Quiz 3

Name:

Alvaro Marquez

Perm Number:

659-6506

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \\ \hline 126 \\ 630 \\ \hline 756 \end{array}$$

$$63 \frac{10}{12} = \frac{5}{6}$$

$$\frac{12}{120}$$

$$12$$

$$10 = 120$$

$$20 = 240$$

$$40 = 480$$

$$60 = 720$$

$$\begin{array}{r} 1 \\ 480 \\ + 240 \\ \hline 720 \end{array}$$

$$\frac{12}{48}$$

$$\frac{12}{26}$$

$$\frac{720}{126}$$

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

$$kt^2 + p^2 + 7$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$\begin{array}{r|l} kt & p \\ \hline kt & kt^2 + 4p \\ \hline p & kt + p^2 \end{array}$$

$$\begin{array}{l} kt^2 + 2kt + p^2 \\ \hline kt^2 + 2kt + p^2 - 2pt - 2p^2 + 7 \\ \hline -2pt - 2p^2 + 7 \\ \hline kt^2 + p^2 + 7 \end{array}$$

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

$$y = mx + b$$

$$y = 3x + (-5)$$

 $y =$ 

$$3x - 5$$

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

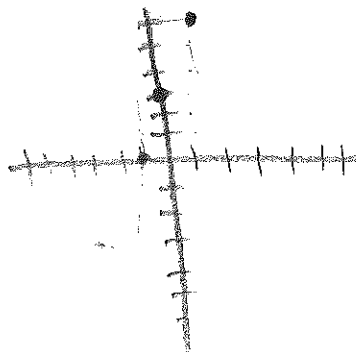
$$y = \frac{3}{1}x$$

$$y = 6 = 3 \cdot 1$$

$$6 = 3x$$

$$6 = 3(2) \quad y =$$

$$3x + 3$$



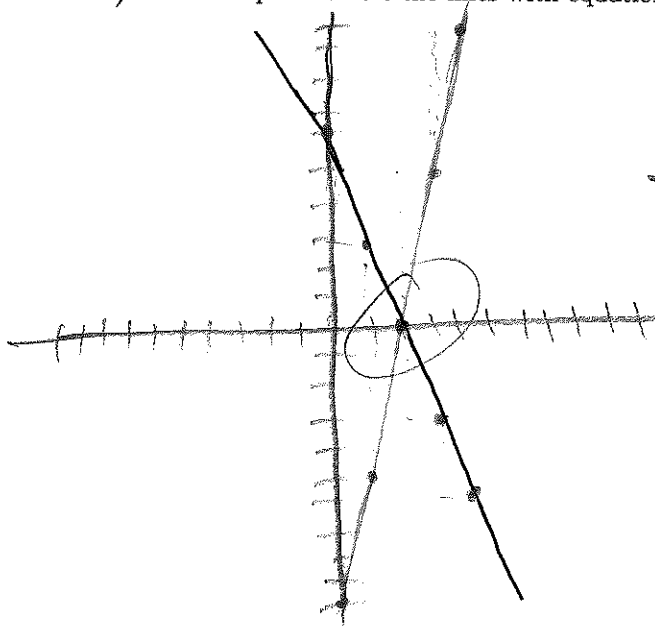
- 5) Find the point where the lines with equations  $y = 5x - 10$  and  $y = -3x + 6$  cross.

$$0 = 5(2) - 10$$

$$0 = 0 \checkmark$$

 $(x, y) =$ 

$$(2, 0)$$





## Quiz 3

Name:

Samuel Huff

Perm Number:

4090189

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

$$\frac{766}{12}$$

$$12 \times 10 = 120$$

$$63 \times 12 = 756$$

$$\begin{array}{r} 766 \\ - 756 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 60 \times 120 \\ \hline 720 \\ 3 \times 36 \\ \hline 756 \end{array}$$

$$63 \frac{10}{12}$$

- 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

~

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

$$y = 3x - 5$$

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

$$\frac{m}{m} = \frac{3}{1}$$

$$\begin{array}{r} (1, 6) \\ - (1, 3) \\ \hline (0, 3) \end{array}$$

$$y = 3x + 3$$

$$6 = 3(1) + 3$$

$$6 = 6 \checkmark$$

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

$$0 = 5(2) - 10$$

$$0 = 10 - 10 \checkmark$$

$$0 = -3(2) + 6$$

$$0 = -6 + 6 \checkmark$$

$$(0, -10)$$

$$(1, -5)$$

$$(2, 0)$$

$$(0, 6)$$

$$(1, 3)$$

$$(2, 0)$$

$$(x, y) =$$

$$(2, 0)$$

## Quiz 3

Name:

Kat Brydson

Perm Number:

5100805

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

$$\frac{766}{12} = \frac{383}{6}$$

64 and 1/6 leftover

$$64 \frac{1}{6}$$

- 2) Substitute  $x = kt + p$  into

Simplify the result as much as possible.

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

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

$$(kt)^2 - p^2 + 7$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$(kt)^2 + 2kt + p^2 - 2kt - 2p^2 + 7$$

$$(kt)^2 - p^2 + 7$$

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

$$y = 3x - 5$$

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

$$\begin{aligned} 6 &= 3(1) + x \\ 6 &= 3 + x \\ -3 &\quad -3 \\ 3 &= x \end{aligned}$$

$$y = 3x + 3$$

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

$$\begin{aligned} 5x - 10 &= -3x + 6 \\ +3x &\quad +3x \end{aligned}$$

$$\begin{aligned} 8x - 10 &= 6 \\ +10 &\quad +10 \end{aligned}$$

$$\frac{8x}{8} = \frac{16}{8}$$

$$x = 2$$

$$(x, y) = (2, 0)$$

## Quiz 3

Name:

Noelle Magana

Perm Number:

6215446

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \overline{) 766} \\ \underline{126} \phantom{0} \\ 46 \phantom{0} \\ \underline{36} \phantom{0} \\ 100 \end{array}$$

$$\begin{array}{r} 63 \overline{) 766} \\ \underline{126} \phantom{0} \\ 46 \phantom{0} \\ \underline{36} \phantom{0} \\ 100 \end{array}$$

$$63 \frac{5}{6}$$

$$63 \frac{10}{12}$$

$$63 \frac{5}{6}$$

- 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

$$3p^2 + kt^2 - 2pkt + 7$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$kt^2 + p^2 - 2pkt + 2p^2 + 7$$

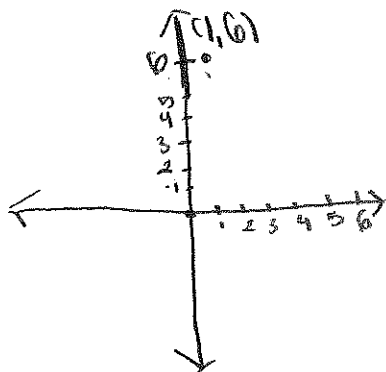
$$3p^2 + kt^2 - 2pkt + 7$$

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

$$y = 3x - 5$$

$$y = \boxed{3x - 5}$$

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



$$6 = 3x + b$$

$$y = 3x + b$$

$$6 = 3 + b$$

$$3 = b$$

0

$$y = 3 + 3$$

$$y = 6$$

$$y = \boxed{3x + 3}$$

$$6 = 3x + 3$$

$$3 = 3x$$

$$x = 1$$

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

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

$$0 = 6 + 6$$

$$0 = 0$$

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

$$8x = 16$$

$$x = 2$$

$$y = 10 - 10$$

$$0$$

$$(x, y) = \boxed{(2, 0)}$$

## Quiz 3

Name:

LUCIA CARCAMO

Perm Number:

6185995

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

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array}$$

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{72} \phantom{0} \\ 46 \\ \underline{36} \phantom{0} \\ 10 \end{array}$$

$$63 \frac{10}{12}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 766 \\ - 756 \\ \hline 10 \end{array}$$

$$63 \frac{10}{12} = 63 \frac{5}{6}$$

$$\begin{array}{r} 383 \\ 2 \overline{) 766} \\ \underline{76} \phantom{0} \\ 10 \end{array}$$

$$\begin{array}{r} 63 \\ \times 12 \\ \hline 126 \\ + 630 \\ \hline 756 \end{array}$$

$$\begin{array}{r} 383 \\ \times 6 \\ \hline 2298 \end{array}$$

$$\begin{array}{r} 63 \\ 6 \overline{) 383} \\ \underline{36} \phantom{0} \\ 23 \\ \underline{18} \phantom{0} \\ 5 \end{array}$$

- 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

$$(kt)^2 - p^2 + 7$$

$$\begin{aligned} & (kt+p)^2 - 2p(kt+p) + 7 \\ & (kt)^2 + \cancel{2ktp} + p^2 - \cancel{2ktp} - 2p^2 + 7 \\ & (kt)^2 - p^2 + 7 \end{aligned}$$

$$\begin{aligned} & (kt+p)(kt+p) \\ & (kt)^2 + ktp + ktp + p^2 \\ & (kt)^2 + 2ktp + p^2 \end{aligned}$$

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

$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

$$y = y_0 + m(x - x_0)$$

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

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

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

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

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

$$8x = 16$$

$$x = 2$$

$$y = 5(2) - 10$$

$$y = 10 - 10$$

$$y = 0$$

 $(x, y) =$ 

$$(2, 0)$$



## Quiz 3

Name:

Leo Safir

Perm Number:

5194121

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

$$\frac{766}{12}$$

$$63\frac{5}{6}$$

$$\frac{10}{12}$$

close one

$$12 \times 50 = 600$$

$$12 \times 12 = 144 + 12$$

$$12 \times 62 = 744$$

$$12 \times 63 = 756$$

$$\begin{array}{r} 720 \\ + 36 \\ \hline 756 \end{array} + \frac{10}{12} = 766$$

- 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

$$kt^2 - p^2 + 7$$

$$(kt + p)^2 - 2p(kt + p) + 7$$

$$2 \cdot 5 \cdot 2 = 30$$

$$2 \cdot 5 \cdot 3 = 30$$

$$(kt + p)(kt + p)$$

$$kt^2 + \boxed{kt + p} + p^2 - \boxed{2pkt} - 2p^2 + 7$$

$$kt^2 + p^2 - 2p^2 + 7 = kt^2 - p^2 + 7$$

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

$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

 $x \ y$ 

$$y = mx + b$$

$$y = 3x + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$-3 \quad -3$$

$$3 = b$$

 $y =$ 

$$3x + 3$$

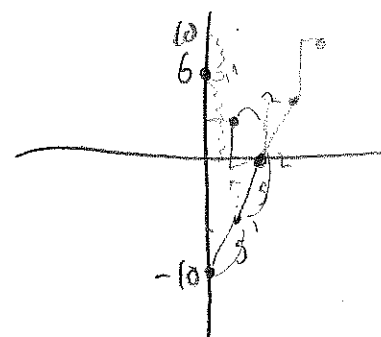
- 5) Find the point where the lines with equations  $y = 5x - 10$  and  $y = -3x + 6$  cross.

$$0 = 5(2) - 10$$

 $+10$ 
 $+10$ 
 $(x, y) =$ 

$$(2, 0)$$

$$10 = 10$$



## Quiz 3

Name:

Fleurcette Juda

Perm Number:

5279351

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

$$\begin{array}{r} 63 \frac{10}{12} \\ 12 \overline{) 766} \\ \underline{-720} \phantom{0} \\ 46 \\ \underline{-36} \phantom{0} \\ 10 \end{array}$$

$$\frac{766}{12}$$

$$\frac{393}{6}$$

$$2 \overline{) 766}$$

$$63 \frac{10}{12} \text{ or } 63 \frac{5}{6}$$

$$\boxed{63 \frac{10}{12}}$$

$$\boxed{63 \frac{5}{6}}$$

$$\begin{array}{r} 63 \frac{5}{6} \\ 6 \overline{) 383} \\ \underline{-360} \phantom{0} \\ 23 \\ \underline{-18} \phantom{0} \\ 5 \end{array}$$

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

$$\boxed{(kt)^2 - p^2 + 7}$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$(kt+p)(kt+p) - 2ktp - 2p^2 + 7$$

$$(kt)^2 + 2ktp + p^2 - 2ktp - 2p^2 + 7$$

$$\boxed{(kt)^2 - p^2 + 7}$$

$$(kt+p)(kt+p)$$

$$(kt+p)^2 - 2p(kt+p)$$

$$kt^2 + 2ktp + p^2 - 2ktp - 2p^2 + 7$$

$$(kt)^2 - p^2 + 7$$

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

$$y = 3x - 5$$

$$y = 3x - 5$$

$$y = 3x - 5$$

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

$$y = mx + b$$

$$6 = 3(1) + b$$

$$b = 3$$

$$y = 3x + 3$$

$$y = 3x + 3$$

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

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

$$-3(2) + 6$$

$$8x = 16$$

$$x = 2$$

$$(x, y) = (2, 0)$$

$$y = 5(2) - 10$$

$$y = 0$$

## Quiz 3

Name:

Max Sheldon

Perm Number:

6300784

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

$$\frac{766}{12}$$

$$12 \overline{) 63.8\bar{3}} \\ \underline{766} \phantom{000} \\ 410 \phantom{00} \\ \underline{480} \phantom{0} \\ 440$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{126} \phantom{0} \\ 630 \phantom{0} \\ \underline{756} \phantom{0} \\ 40 \phantom{0} \end{array}$$

$$63 \frac{5}{6}$$

- 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

$$\cancel{ktkt} - p^2 + 7 \rightarrow (kt)^2 - p^2 + 7$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$(kt+p)(kt+p)$$

$$(kt)^2 + \cancel{kt p} + \cancel{kt p} + p^2 - 2p \cancel{kt} - 2p^2 + 7$$

$$(kt)^2 - p^2 + 7$$

$$\begin{array}{r} (10)^2 - (8)^2 + 7 \\ \hline 10 - 8 + 3 = 5 \end{array}$$

$$\begin{array}{r} 436345 \\ 315 \overline{) 116} \\ \underline{180} \\ 296 \end{array}$$

$$\begin{array}{r} 248 \\ 144 \overline{) 3} \end{array}$$

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

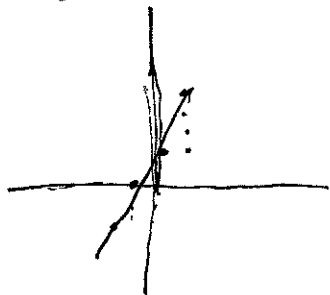
$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

 $y =$ 

$$3x + 3$$

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

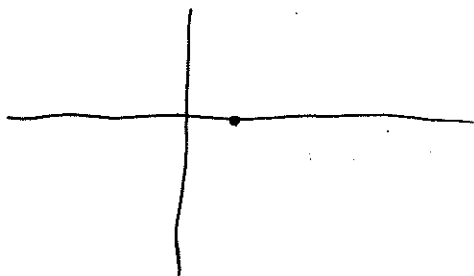
$$5x - 10 = -3x + 6$$

$$8x = 16$$

$$x = 2$$

 $(x, y) =$ 

$$(2, 0)$$



## Quiz 3

Name:

Kyla Drengler Spin

Perm Number:

8696767

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{72} \phantom{0} \\ 46 \\ \underline{36} \\ 10 \end{array}$$

$$63 \frac{10}{12}$$

$$63 \frac{5}{6}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 63 \\ \times 6 \\ \hline 378 \\ 5 \phantom{00} \\ \hline 383 \end{array}$$

$$\begin{array}{r} 383 \\ \times 2 \\ \hline 766 \end{array}$$

$$\frac{1}{12}$$

- 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

$$-2pkt - 2p^2$$

$$(kt)^2 - p^2 + 7$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$(kt)^2 + 2ktp + p^2 - 2pkt - 2p^2 + 7$$

$$(kt)^2 - p^2 + 7$$

	kt	p
kt	(kt) <sup>2</sup>	ktp
p	ktp	p <sup>2</sup>

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

$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

$$6 = 3(1) + b$$

$$-3 \quad -3$$

$$3 = b$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

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

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

$$+3x + 10 \quad +3x + 10$$

$$\frac{8x}{8} = \frac{16}{8}$$

$$\underline{x = 2}$$

 $(x, y) =$ 

$$(2, 0)$$

$$y = 5(2) - 10$$

$$10 - 10$$

$$\underline{y = 0}$$

$$y = -3(2) + 6$$

$$y = -6 + 6 = 0$$



## Quiz 3

Name: Isabella Agrusa

Perm Number:

3962537

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

$$\frac{766}{12}$$

$$63 \frac{16}{12} = 63 \frac{5}{6}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 33 \\ \times 12 \\ \hline 66 \\ 33 \\ \hline 396 \end{array}$$

$$\begin{array}{r} 33 \\ \times 12 \\ \hline 66 \\ 33 \\ \hline 396 \end{array}$$

$$\begin{array}{r} 66 \\ \times 12 \\ \hline 132 \\ 66 \\ \hline 792 \end{array}$$

$$\begin{array}{r} 60 \\ \times 12 \\ \hline 120 \\ 60 \\ \hline 720 \end{array}$$

$$\begin{array}{r} 63 \\ \times 12 \\ \hline 126 \\ 63 \\ \hline 756 \end{array}$$

$$\begin{array}{r} 64 \\ \times 12 \\ \hline 128 \\ 64 \\ \hline 768 \end{array}$$

→ 10 left over

- 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

$$kt^2 + 3p^2 - 2p(kt) + 7$$

$$x = kt + p$$

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

$$(kt + p)^2 - 2p(kt + p) + 7$$

$$kt^2 + p^2 - 2p(kt) + 2p^2 + 7 \leftarrow \text{rearrange}$$

$$kt^2 + p^2 + 2p^2 - 2p(kt) + 7$$

$$kt^2 + 3p^2 - 2p(kt) + 7$$

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

$$y = mx + b$$

$$y = 3x + (-5)$$

 $y =$ 

$$3x - 5$$

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

$$(1, 6) \quad m = 3$$

$$y = mx + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$\begin{array}{r} -3 \\ -3 \end{array}$$

$$3 = b$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

$$y = 3x + 3$$

$$6 = 3(1) + 3$$

$$6 = 3 + 3$$

$$6 = 6 \quad \checkmark$$

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

$$y = 5x - 10$$

$$\frac{\text{rise}}{\text{run}} = \frac{5}{1}$$

$$b = -10$$

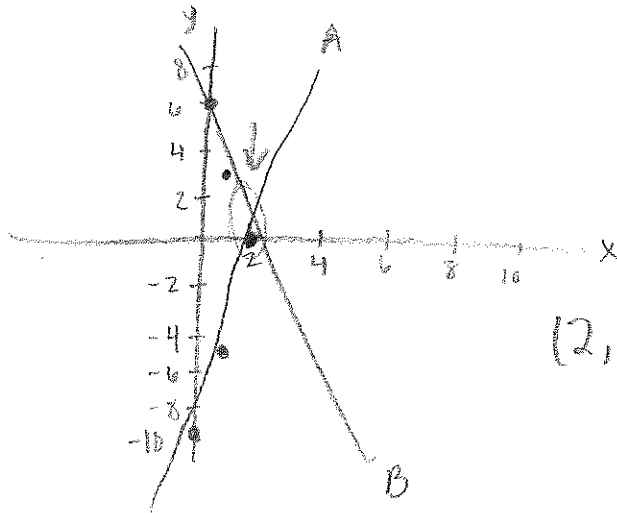
$$y = -3x + 6$$

$$\frac{\text{rise}}{\text{run}} = -\frac{3}{1}$$

$$b = 6$$

 $(x, y) =$ 

$$(2, 0)$$



$$(2, 0)$$

$$y = 5x - 10$$

$$0 = 5(2) - 10$$

$$0 = 10 - 10$$

$$0 = 0$$

 $\checkmark$ 

$$y = -3x + 6$$

$$0 = -3(2) + 6$$

$$0 = -6 + 6$$

$$0 = 0$$

 $\checkmark$

## Quiz 3

Name:

Mustpha Saeed

Perm Number:

4744215

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

$$\frac{766}{12}$$

Handwritten work shows simplification by dividing numerator and denominator by 2, resulting in  $\frac{383}{6}$ .

$$12 \overline{) 766}$$

Handwritten long division showing 63 with a remainder of 10.

$$63 \frac{10}{12} \text{ simplify}$$

$$63 \frac{5}{6}$$

$$63 \frac{5}{6}$$

- 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

$$(kt)^2 - p^2 + 7$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$((kt)^2 + 2ktp + p^2) - (2ktp + 2p^2) + 7$$

$$(kt)^2 + 2ktp + p^2 - 2ktp - 2p^2 + 7$$

$$(kt)^2 - p^2 + 7$$

$$kt - p + \sqrt{7}$$

$$p = x - kt$$

$$kt \quad p$$

$$k(kt)^2 \quad ktp$$

$$p \quad ktp \quad p^2$$

$$kt \quad p$$

$$k \quad k^2 \quad kt$$

$$t \quad kt \quad t^2$$

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

$$y = 3x - 5$$

$$y = \boxed{3x - 5}$$

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

$$\begin{matrix} (1, 6) \\ x \quad y \end{matrix}$$

$$y = mx + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$3 = b$$

$$y = 3x + 3$$

$$y = \boxed{3x + 3}$$

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

$$y = 5(2) - 10$$

$$= 10 - 10$$

$$y = 0$$

$$y = -3(2) + 6$$

$$= -6 + 6$$

$$y = 0$$

$$\begin{matrix} 5x - 10 & = & -3x + 6 \\ +10 & & +10 \end{matrix}$$

$$\begin{matrix} 5x & = & -3x + 16 \\ +3x & & +3x \end{matrix}$$

$$8x = 16$$

$$x = 2$$

$$(2, 0)$$

$$(x, y) = \boxed{(2, 0)}$$

## Quiz 3

Name:

Justin Jose

Perm Number:

5345780

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \\ 100 \end{array}$$

$$63 \frac{10}{12} \div \frac{2}{2} = 63 \frac{5}{6}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 323 \\ 2 \overline{) 766} \\ \underline{-6} \phantom{0} \\ 16 \\ \underline{-16} \\ 00 \end{array}$$

$$\frac{383}{6}$$

$$\begin{array}{r} 63 \text{ } 5 \\ 6 \overline{) 383} \\ \underline{-36} \phantom{0} \\ 23 \\ \underline{-18} \\ 5 \end{array}$$

- 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

$$kt^2 - p^2 + 7$$

$$\begin{aligned} & (kt+p)^2 - 2p(kt+p) + 7 \\ & kt^2 + 2ktp + p^2 - 2ktp - 2p^2 + 7 \\ & kt^2 - p^2 + 7 \end{aligned}$$

$$kt^2 - p^2 + 7$$

 $kt \quad p$ 

$kt$	$kp$	$kt^2$
$p$	$ktp$	$p^2$

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

$$y = mx + b$$

$$y = 3(x) - 5$$

 $y =$ 

$$3x + (-5)$$

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

$$y = mx + b$$

$$y = 3x + b$$

$$6 = 3(1) + b$$

$$3 = 3 + b$$

$$-3 \quad -3$$

$$3 = b$$

 $y =$ 

$$3x + 3$$

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

$$5x - 10 = -3x + 6 \quad y = 5(2) - 10$$

$$+3x \quad +10 \quad +3x \quad +10 \quad y = 10 - 10$$

$$\frac{8x}{8} = \frac{16}{8}$$

$$y = 0$$

 $(x, y) =$ 

$$(2, 0)$$

$$x = 2$$

$$y = 0$$

## Quiz 3

Name:

Victoria McNabb

Perm Number:

5171038

$$\begin{array}{r}
 63 \\
 12 \\
 \hline
 + 126 \\
 63 \\
 \hline
 756
 \end{array}$$

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

$$\frac{766}{12}$$

$$63 \frac{10}{12} = 63 \frac{5}{6}$$

$$63 \frac{5}{6}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r}
 12 \overline{) 12} \\
 \underline{12} \\
 0
 \end{array}$$

$$\begin{array}{r}
 63 \\
 12 \overline{) 766} \\
 \underline{72} \\
 46 \\
 \underline{36} \\
 10
 \end{array}$$

$$\begin{array}{r}
 766 \\
 756 \\
 \hline
 10
 \end{array}$$

$$\begin{aligned}
 &(kt+p)^2 - 2p(kt+p) + 7 \\
 &kt^2 + 2ktp + p^2 - 2pkt - 2p^2 + 7 \\
 &kt^2 - p^2 + 7
 \end{aligned}$$

- 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

$$kt^2 - p^2 + 7$$

$$\begin{aligned}
 k &= 1 \\
 t &= 2 \\
 p &= 3
 \end{aligned}$$

$$\begin{aligned}
 &(kt+p)^2 - 2p(kt+p) + 7 \\
 &= kt^2 + 2ktp + p^2 - 2pkt - 2p^2 + 7
 \end{aligned}$$

$$\begin{aligned}
 &(kt+p)(kt+p) \\
 &kt^2 + ktp + ktp + p^2 \\
 &kt^2 + 2ktp + p^2
 \end{aligned}$$

$$kt^2 + 2ktp + p^2 - 2pkt - 2p^2 + 7$$

$$kt^2 + 2ktp - p^2 - 2pkt + 7$$

$$(kt+p)(kt+p)$$

$$kt^2 + ktp + ktp + p^2$$

$$kt^2 + 2ktp + p^2$$

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

$$y = mx + b$$

$$y = 3x - 5$$

$$y = 3x - 5$$

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

$$y = mx + b$$

$$y = 3x + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$\begin{array}{r} 6 \\ - 3 \\ \hline 3 \end{array}$$

$$3 = b$$

$$y = 3x + 3$$

$$6 = 3(1) + 3$$

$$6 = 3 + 3$$

$$6 = 6 \checkmark$$

$$y = 3x + 3$$

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

$$\begin{array}{r} 5x - 10 = -3x + 6 \\ + 3x + 10 \quad + 3x + 10 \\ \hline \end{array}$$

$$\frac{8x}{8} = \frac{16}{8}$$

$$x = 2$$

$$(x, y) = (2, 0)$$

$$y = 5(2) - 10$$

$$y = 10 - 10$$

$$y = 0$$

$$y = -3(2) + 6$$

$$y = -6 + 6$$

$$y = 0$$

$$0 = 5(2) - 10$$

$$0 = 10 - 10$$

$$0 = 0 \checkmark$$

$$0 = -3(2) + 6$$

$$0 = -6 + 6$$

$$0 = 0$$



## Quiz 3

Name:

Iliana DeLaRiva

Perm Number:

659473

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

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \\ 10 \end{array}$$

$$\frac{766}{12} = 10 \frac{63}{12} \div 3 = \frac{21}{4} = 10 \frac{21}{4}$$

$$10 \frac{21}{4}$$

$$\begin{array}{r} 5 \\ 4 \overline{) 21} \\ \underline{-20} \\ 1 \end{array} = 1 \frac{5}{4}$$

- 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

$$(kt + p)^2 - 2pkt - 2p^2 + 7$$

$$(kt + p)^2 - 2p(\overbrace{kt + p}) + 7$$

$$(kt + p)^2 - 2pkt - 2p^2 + 7$$

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

$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

$$y = mx + b$$

$$y = 3x + 6$$

 $y =$ 

$$3x + 6$$

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

$$\begin{array}{r} 5x - 10 = -3x + 6 \\ + 3x + 10 \quad + 3x + 10 \\ \hline \end{array}$$

$$\frac{8x}{8} = \frac{16}{8}$$

$$x = 2$$

 $(x, y) =$ 

$$(2, 0)$$

$$y = 5(2) - 10$$

$$y = 10 - 10$$

$$y = 0$$

$$(2, 0)$$

## Quiz 3

04/12/22

Name:

Isabella Bishop

Perm Number:

3760204

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

$$\frac{766}{12}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 12 \\ \times 5 \\ \hline 60 \end{array}$$

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array}$$

$$\begin{array}{r} 12 \\ \times 4 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 12 \\ \times 3 \\ \hline 36 \end{array}$$

$$\begin{array}{r} 63. \\ 12 \overline{) 766.0} \\ \underline{72} \phantom{0} \\ 46 \phantom{0} \\ \underline{36} \phantom{0} \\ 10 \phantom{0} \end{array}$$

$$63 \frac{10}{12} = \frac{5}{6}$$

$$\begin{array}{r} 63 \frac{5}{6} \\ \times 6 \\ \hline 384 \phantom{0} \\ + 5 \phantom{0} \\ \hline 389 \end{array}$$

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array} \quad \begin{array}{r} 12 \\ \times 3 \\ \hline 36 \end{array} \quad \begin{array}{r} 12 \\ \times 4 \\ \hline 48 \end{array}$$

$$\begin{array}{r} 63. \\ 12 \overline{) 766.0} \\ \underline{72} \phantom{0} \\ 46 \phantom{0} \\ \underline{36} \phantom{0} \\ 10 \phantom{0} \end{array}$$

- 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

$$-p^2 + kt^2 + 7$$

$$x = kt + p$$

↓

FOIL

$$(kt + p)^2 - 2p(kt + p) + 7$$

$$(kt + p)(kt + p)$$

$$\begin{array}{l} kt^2 + ktp + ktp + p^2 \\ \hline kt^2 + 2ktp + p^2 \end{array}$$

$$-2p(kt + p) + 7 = -2pkt - 2p^2 + 7 + kt^2 + 2ktp + p^2$$

$$-p^2 + kt^2 + 7$$

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

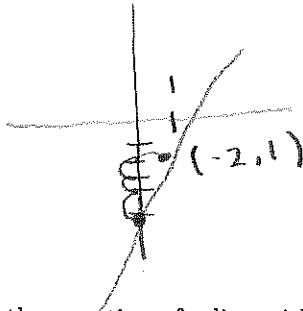
$$y = mx + b$$

$$y = 3x - 5 \quad \rightarrow (0, -5)$$

$$\frac{\text{rise} = 3}{\text{run} = 1}$$

$y =$

$$3x - 5$$



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

$$y = 3x + b$$

$$6 = 3(1) + b$$

$y =$

$$3x + 3$$

$$6 = 3 + b$$

$$-3 \quad -3$$

$$b = 3$$

$$y = 3x + 3$$

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

$$\begin{array}{r} 5x - 10 = -3x + 6 \\ +10 \quad \quad +10 \end{array}$$

$$\begin{array}{r} 5x = -3x + 16 \\ +3x \quad +3x \end{array}$$

$$8x = 16$$

$$\begin{array}{r} 8 \quad 8 \end{array}$$

$$\boxed{x = 2}$$

Plug in  $\rightarrow$

$(x, y) =$

$$(2, 0)$$

$$y = -3(2) + 6$$

$$y = -6 + 6$$

$$y = 0$$

## Quiz 3

Name:

Anyi Zhao

Perm Number:

X307060

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{72} \phantom{0} \\ 46 \\ \underline{36} \\ 10 \end{array}$$

$$63 \frac{10}{12} = 63 \frac{5}{6}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 383 \\ 2 \overline{) 766} \\ \underline{6} \phantom{0} \\ 16 \\ \underline{16} \\ 0 \end{array}$$

$$\begin{array}{r} 63 \\ 46 \\ \underline{378} \end{array}$$

$$\begin{array}{r} 383 \\ 6 \phantom{0} \\ \underline{378} \\ 5 \end{array}$$

- 2) Substitute  $x = kt + p$  into

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

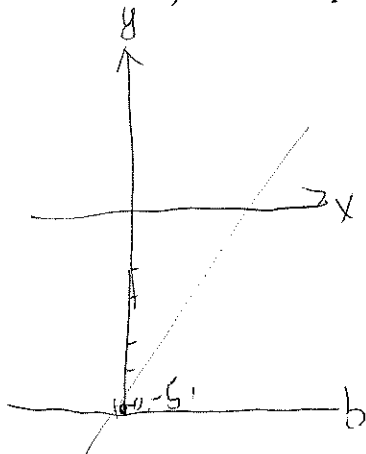
Simplify the result as much as possible.

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

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

$$\begin{aligned} & (kt+p)^2 - 2p(kt+p) + 7 \\ &= (kt)^2 + p^2 + 2kp - 2kp - 2p^2 + 7 \\ &= (kt)^2 - p^2 + 7 \end{aligned}$$

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



$$y = 3x + b$$

$$3x_0 + b = -5$$

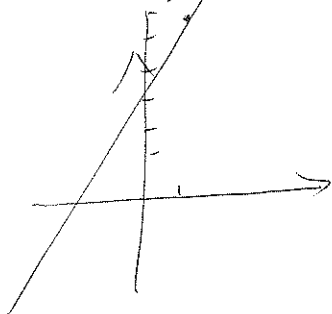
$$b = -5$$

$$y = 3x - 5$$

$y =$

$$3x - 5$$

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



$$3x + b = y$$

$$3 \cdot 1 + b = 6$$

$$b = 3$$

$$y = 3x + 3$$

$y =$

$$3x + 3$$

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

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

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

$$8x = 16$$

$$x = 2$$

$$5 \times 2 - 10 = 0$$

$$-3 \times 2 + 6 = 0$$

$$y = 0$$

$(x, y) =$

$$(2, 0)$$

## Quiz 3

Name:

Jessica Taghizadeh

Perm Number:

6681472

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \\ 10 \end{array}$$

$$63 \frac{10}{12} \rightarrow 63 \frac{5}{6}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 383 \\ 2 \overline{) 766} \\ \underline{-76} \phantom{0} \\ 0 \end{array}$$

$$\frac{383}{2}$$

$$\begin{array}{r} 191 \\ 2 \overline{) 382} \\ \underline{-38} \phantom{0} \\ 0 \end{array}$$

$$\begin{array}{r} 191 \\ 3 \overline{) 573} \\ \underline{-57} \phantom{0} \\ 0 \end{array}$$

$$\begin{array}{r} 63 \\ 3 \overline{) 191} \\ \underline{-18} \phantom{0} \\ 11 \\ \underline{-9} \\ 2 \end{array}$$

$$\rightarrow 63 \frac{2}{3} ?$$

$$\rightarrow 191$$

- 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

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

$$(k+p)^2 - 2p(k+p) + 7$$

$$(k+p)(k+p) - 2p(k+p) + 7$$

$$k^2 + kp + kp + p^2 - 2p(k+p) + 7$$

$$k^2 + \cancel{2kp} + p^2 + \cancel{-2kp} - 2p^2 + 7$$

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

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

$$y = mx + b$$

$$y = 3x + -5$$

 $y =$ 

$$3x + -5$$

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

$$y = mx + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$-3 \quad -3$$

$$3 = b$$

$$\xrightarrow{\text{equation}} y = 3x + 3$$

 $y =$ 

$$3x + 3$$

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

$$y = 5x - 10$$

$$\text{when } x = 2, y = 0$$

$$x = 3, y = 5$$

$$x = 4, y = 10$$

$$y = -3x + 6$$

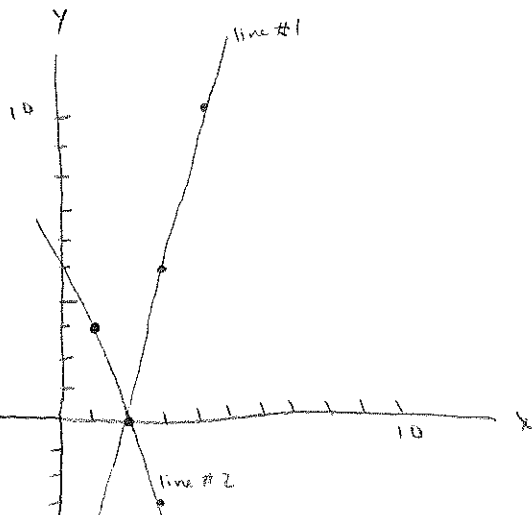
$$\text{when } x = 2, y = 0$$

$$\text{when } x = 1, y = 3$$

$$\text{when } x = 3, y = -3$$

 $(x, y) =$ 

$$(2, 0)$$





## Quiz 3

Name:

Candice Morenc

Perm Number:

8930498

Section T: 8:00 AM

$$\begin{array}{r} 76 \\ -72 \\ \hline 96 \end{array}$$

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

$$\frac{766}{12} \cdot 12$$

6.2

$$766 \cdot 12$$

- 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

$$\boxed{k^2 t^2 + 2kt p}$$

$$\boxed{k^2 t^2 - p^2}$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$(kt+p)(kt+p) - 2kt p - 2p^2$$

$$k^2 t^2 + kt p + kt p + p^2$$

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

$$\boxed{k^2 t^2 - p^2}$$

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

$$y = mx + b$$

$$3x + -5$$

 $y =$ 

$$3x - 5$$

- 4) Find the equation of a line with slope  $m = 3$  passing through the point  $(1, 6)$ .  $(2, 9)$

$$y = 3x + b$$

$$\text{Slope } \frac{3}{1}$$

 $y =$ 

$$3x + 2$$

$$y = 3(x) + b$$

$$\begin{matrix} 6 & 1 \\ \frac{6}{3} = \frac{3}{1} & y = 2 \end{matrix}$$

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

$$\begin{array}{r} 5x - 10 = -3x + 6 \\ +3x + 10 \quad +3x + 10 \end{array}$$

 $(x, y) =$ 

$$(2, 0)$$

$$+5x$$

$$\frac{8x}{8} = \frac{16}{8}$$

$$x = 2$$

$$y = 5(2) - 10$$

$$10 - 10$$

$$y = 0$$

$$y = -3(2) + 6$$

$$-6 + 6$$

$$y = 0$$

## Quiz 3

Name:

Taylor, Iden

Perm Number:

570941-5

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63.83 \\ 12 \overline{) 7660} \\ \underline{-72} \phantom{0} \\ 46 \phantom{0} \\ \underline{-36} \phantom{0} \\ 100 \\ \underline{-96} \\ 40 \\ \underline{-36} \\ 4 \end{array}$$

$$63 \frac{83}{100}$$

$$\frac{83}{100}$$

$$\begin{array}{l} k^2t^2 + kpt + kpt + p^2 - 2px + 7 \\ k^2t^2 + 2kpt + p^2 \end{array}$$

- 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

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

$$(kt+p)^2 = -2p(kt+p) + 7$$

$$(kt+p)(kt+p) = -2pkt - 2p^2 + 7$$

$$k^2t^2 + ktP + kpt + p^2$$

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

$$k^2t^2 + 2ktp + 3p^2 = -2pkt + 7$$

$$k^2t^2 + 4ktp + 3p^2 = 7$$

$$k^2t^2 + 4ktp + 3p^2 = 7$$

$$k^2t^2 + 2ktp + p^2 - 2ktP - p^2$$

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

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

$y =$

$$3x - 5$$

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

$$(1, 6)$$

$y =$

$$\frac{1}{2}x + \frac{b}{6}$$

$$6y = 3x + b$$

$$y = \frac{1}{2}x + \frac{b}{6}$$

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

$$x = 2$$

$$y = 10 - 10$$

$$(x, y) =$$

$$2, 5$$

$$y = -5 + 6$$

$$= 1$$

$$5 = -2x + 6$$

$$\frac{1}{-2} = \frac{-2x}{-2}$$

$$1 = 5x - 10$$

$$11 = 5x$$

$$\frac{11}{5} = x$$

$$\begin{array}{l} 5 = 5x - 10 \\ 15 = 5x \\ x = 2 \end{array}$$

$$\begin{array}{l} -5 = 5x - 10 \\ 5 = 5x \\ x = 1 \end{array}$$

$$\begin{array}{l} -5 = -2x + 6 \\ -11 = -2x \end{array}$$

$$1 = -2x + 6$$

$$5 = -2x$$

$$2 = 5x - 10$$

$$\begin{array}{l} 12 = 5x \\ 3 = 5x - 10 \end{array}$$

$$\begin{array}{l} 5 = -2x + 6 \\ -1 = -2x \\ x = 1 \end{array}$$

## Quiz 3

Name:

Ian Huang

Perm Number:

3926409

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

$$\frac{766}{12}$$

Handwritten work for problem 1:

$$12 \overline{) 766}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{72} \phantom{0} \\ 46 \phantom{0} \\ \underline{36} \phantom{0} \\ 100 \phantom{0} \\ \underline{96} \phantom{0} \\ 40 \phantom{0} \\ \underline{36} \phantom{0} \\ 40 \end{array}$$

$$63 \frac{10}{12} = 63 \frac{5}{6}$$

$$\begin{array}{r} 63 \\ \times 12 \\ \hline 126 \\ 630 \\ \hline 756 \end{array}$$

$$\begin{array}{r} 766 \\ - 756 \\ \hline 10 \end{array}$$

Final answer in box:  $63 \frac{5}{6}$

- 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

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

$$(kt + p)^2 - 2p(kt + p) + 7$$

check

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

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

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

$$(kt + p)(kt + p) - 2p(kt + p) + 7$$

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

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

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

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

$$b = -5$$

$$m = 3$$

$$y = mx + b$$

$$y = 3x - 5$$

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

$$y - y_0 = m(x - x_0)$$

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

$$y = 3x + 3$$

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

$$= 3x - 3 + 6$$

$$y = 3x + 3$$

$$3x - 3$$

$$\downarrow \text{check}$$

$$y - 6 = 3x - 3$$

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

$$y = 3x + 3$$

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

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

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

$$8x = 16$$

$$x = 2$$

$$(x, y) = (2, 0)$$

check

$$y = -3(2) + 6$$

$$y = 5(2) - 10$$

$$= 10 - 10$$

$$y = 0$$

$$= -6 + 6$$

$$y = 0$$

## Quiz 3

Name:

Mason Montgomery

Perm Number:

392956

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

$$\frac{766}{12}$$

$$63\frac{5}{6}$$

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

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

$$(kt+p)^2 - 2p(kt+p) + 7$$

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

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

$$(kt+p)^2 - 2p(kt+p) + 7$$

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

k

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

$y =$

$$3x - 5$$

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

$$y = 3x +$$

$$(1, 6)$$

$$(0, 3)$$

$y =$

$$3x + 3$$

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

$$\begin{array}{r} 5x - 10 = -3x + 6 \\ +3x \quad +10 \quad +3x \quad +10 \end{array}$$

$$8x = 16$$

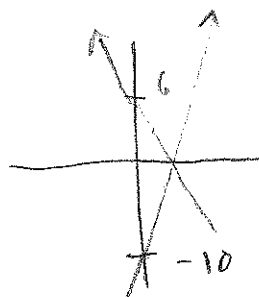
$$x = 2$$

$$5(2) - 10 = 0$$

$$-3(2) + 6 = 0$$

$(x, y) =$

$$(2, 0)$$





## Quiz 3

Name:

Nathan Starkovich

Perm Number:

4191813

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

$$\frac{766}{12}$$

$$63 \frac{5}{6}$$

- 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 →

$$(kt+p)(kt+p) = (kt)^2 + kt p + kt p + p^2 = (kt)^2 - p^2 + 7$$

$$\begin{aligned} & (kt+p)^2 - 2p(kt+p) + 7 \\ & (kt)^2 + \cancel{2kt p} + p^2 - \cancel{2kt p} - 2p^2 + 7 \\ & (kt)^2 - p^2 + 7 \end{aligned}$$

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

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

$$y = 3x + b$$

$$6 = 3 + b$$

$$3 = b$$

 $y =$ 

$$3x + 3$$

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

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

$$8x = 16$$

$$x = 2$$

 $(x, y) =$ 

$$(2, 0)$$

$$y = 5(2) - 10$$

$$y = 0$$

## Quiz 3

Name:

Marc Nunez

Perm Number:

8042103

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \text{ r } 10 \\ 12 \overline{) 766} \\ \underline{- 720} \phantom{0} \\ 46 \\ \underline{- 36} \phantom{0} \\ 10 \end{array}$$

$$63 \frac{10}{12}$$

$$63 \frac{10}{12}$$

- 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

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

$$\begin{aligned} (k+p)^2 - 2p(k+p) + 7 \\ - \cancel{p}kt - \cancel{p}p^2 + 7 \end{aligned}$$

$$(k+p)(k+p)$$

$$k^2t^2 + ktp - \cancel{p}kt - \cancel{p}p^2$$

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

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

$$y = mx + b$$

$$y - y_0 = m(x - x_0)$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

$$y - 6 = m(x - 1)$$

$$y = 3x + b$$

$$(2, 9)$$

$$1 = 18 + b$$

$$y - 6 =$$

$$b = -17$$

$$y = 3x - 17$$

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

$$y = 3x - 17$$

$$y - 6 = 3x - 3$$

$$9 = 6 - 17$$

$$y = 3x + 3$$

$$b = 3 + 3 = 6$$

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

$$(0, -10), (0, 6)$$

$$(1, -5), (1, 3)$$

$$(2, 0), (2, 0)$$

 $(x, y) =$ 

$$(2, 0)$$

## Quiz 3

Name:

Riley Clark

Perm Number:

5155312

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

$$12 \overline{) 766.0}$$

$$\frac{766}{12}$$

$$\underline{72}$$

$$\begin{array}{r} 46 \\ 36 \\ \hline 100 \end{array}$$

$$63 \frac{10}{12} =$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 8 \\ 112 \\ 5 \\ \hline 96 \end{array}$$

$$40.0$$

$$63 \frac{5}{6}$$

$$12 \overline{) 10.0}$$

- 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

$$(kt)^2 - p^2 + 7$$

$$(kt+p)(kt+p) - 2p(kt+p) + 7$$

$$(kt^2 + \cancel{ktp} + \cancel{ktp} + p^2) - (\cancel{2ktp} + 2p^2) + 7$$

$$kt^2 + p^2 - 2p^2 + 7$$

$$kt^2 - p^2 + 7$$

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

$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

$$y = 3x + b$$

$$\frac{6}{3} = \frac{3(1)}{3} + b$$

$$2 = b$$

 $y =$ 

$$3x + 2$$

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

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

$$8x = 16$$

$$x = 2$$

$$y = 5(2) - 10$$

$$y = 0$$

 $(x, y) =$ 

$$(2, 0)$$

## Quiz 3

Name: Elk Schultz

Perm Number: 5295183

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766.0} \\ \underline{72} \phantom{0} \\ 46 \phantom{0} \\ \underline{36} \phantom{0} \\ 10 \phantom{0} \end{array}$$

$$63 \frac{5}{6}$$

$$\begin{array}{r} 12 \\ 6 \\ \hline 72 \\ + 12 \\ \hline 84 \\ 17 \\ \hline 96 \end{array}$$

$$\begin{array}{r} 12 \\ \times 63 \\ \hline 36 \\ 720 \\ \hline 756 \end{array}$$

$$63 \frac{10}{12} \rightarrow 63 \frac{5}{6}$$

$$\begin{array}{r} 12 \\ \times 63 \\ \hline 36 \\ 720 \\ \hline 756 \end{array}$$

$$\begin{array}{r} 766 - 756 \\ = 10/12 \\ \checkmark \frac{5}{6} \end{array}$$

$$(k+t+p)(k+t+p)$$

- 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

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

$$\begin{array}{l} k^2 + t^2 + kt + p + kt + p + p^2 \\ k^2 + t^2 + 2kt + p^2 \end{array}$$

$$x = kt + p$$

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

$$kt + kt$$

$$(2p(k+t+p))$$

$$2kt + 2p^2$$

$$(kt+p)^2 - (2p(kt+p)) + 7$$

$$2p(kt+p)$$

$$2kt + 2p^2$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$k^2 + t^2 + 2kt + p^2 - (2kt + 2p^2) + 7$$

$$(kt+p)(kt+p)$$

$$k^2 + t^2 + kt + p + kt + p + p^2$$

$$k^2 + t^2 + 2kt + p^2$$

$$k^2 + t^2 + \cancel{2kt} + p^2 - \cancel{2kt} - \cancel{2p^2} + 7$$

$$k^2 + t^2 + \cancel{2kt} + p^2 - \cancel{2kt} - \cancel{2p^2} + 7$$

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

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

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

$$y = 3x - 5$$

$$y = mx + b$$

$$y = 3x - 5$$

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

$$y = 3x + b$$

$$6 = 3(1) + b$$

$$b = 3$$

$$y = 3x + 3$$

$$y = 3x + 3$$

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

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

$$8x = 16$$

$$\underline{x = 2}$$

$$(x, y) =$$

$$(2, 0)$$

$$y = 5(2) - 10$$

$$y = 10 - 10$$

$$y = 0$$

$$y = -3(2) + 6$$

$$y = -6 + 6$$

$$y = 0$$



## Quiz 3

Name:

Aiden Afrasiabi

Perm Number:

5229869

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

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{72} \end{array}$$

$$\begin{array}{r} 1 \\ 12 \\ 12 \\ 12 \\ 12 \\ \hline 12 \\ \hline 60 \\ + 12 \\ \hline 72 \end{array}$$

$$63 \frac{10}{12}$$

- 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

$$kt^2 - p^2 - 2pkt + 7$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$kt^2 + p^2 - 2pkt - 2p^2 + 7$$

$$kt^2 - p^2 - 2pkt + 7$$

$$\begin{array}{l} 1p^2 + -2p^2 \\ -1p^2 \end{array}$$

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

$$y = mx + b$$

$$y = 3x + -5$$

 $y =$ 

$$3x - 5$$

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

$$y = mx + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$3 = b$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

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

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

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

$$5x + 3x = 16$$

$$\frac{8x}{8} = \frac{16}{8}$$

$$x = 2$$

$$y = 5(2) - 10$$

$$10 - 10 = 0$$

$$y = 0$$

$$y = -3(2) + 6$$

$$y = -6 + 6$$

$$y = 0$$


 $(x, y) =$ 

$$(2, 0)$$

## Quiz 3

Name:

Yang Li

Perm Number:

399 6188

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

$$\frac{46}{60} \quad \frac{766}{12}$$

$$\begin{array}{r} 63 \\ 12 \\ \hline 126 \\ 63 \\ \hline 756 \end{array}$$

$$63 \frac{5}{6}$$

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

$$(kt)^2 - p^2 + 7$$

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

$$2p(kt+p)$$

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

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

 $y =$ 

$$3x - 5$$

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

 $y =$ 

$$3x + 3$$

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

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

$$8x = 16$$

$$x = 2$$

 $(x, y) =$ 

$$(2, 0)$$

## Quiz 3

Name:

Maya Cooks

Perm Number:

6398730

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

$$\frac{766}{12} \div \frac{2}{2} \quad \frac{393}{6} \quad + 300$$

393

393

300  
+

$$\frac{393}{6}$$

166

$$\frac{393}{6} \div \frac{393}{6}$$

- 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

$$k^2 - 2kt + 7$$

$$(k+p)^2 - 2(k+p) + 7$$

$$(k+p) + k+p - 2k + 2p + 7$$

$$k^2 + 4p - 2k + 7$$

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

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

$$y = m(x) - 5$$

$y =$

$$3(x) - 5$$

$$\frac{y+5}{3} = \frac{m \cdot 3}{3}$$

$$m = \frac{y+5}{3}$$

$$y+5 = m(x) - 5$$

$$\frac{y+5}{m} = x$$

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

$$6 = 3 + b$$

$$-3 \quad -3$$

$$3 = b$$

2 equations

$$6 = 3(1) + b$$

$$6 = m + b \quad 6 = 3 + 3$$

$$-m \quad -m$$

$y =$

$$3(x) + 3$$

$$6 = 1 + b$$

$$6 - m = b$$

$$6 = m(1) + (6 - m) \quad 6 = 6 + m^2$$

$$6 = m(1)$$

$$\sqrt{0} = \sqrt{m^2}$$

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

$$\frac{y_2 - y_1}{x_2 - x_1} = \text{slope}$$

$$y = mx + b$$

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

$$-10 \quad -6$$

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

$$-4 = -3x$$

$$x = \frac{4}{3}$$

$(x, y) =$

$$(2, 0)$$

$$y = 5x - 10$$

$$y = 5\left(\frac{x+10}{5}\right)$$

$$y = \frac{5x+50}{5} - 10$$

$$y = -\frac{3}{-3}\left(\frac{x-6}{-3}\right) + 6$$

$$y = -3x + 6$$

$$-6 \quad -6$$

$$y = 3x + 18 + 6$$

$$3x + 24$$

$$\frac{y-6}{-3} = \frac{y-24}{3}$$

\*\*\*  
 \* Quiz 3 \*  
 \*\*\*

Name:

JO Haddad

Perm Number:

4700282

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

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{72} \phantom{0} \\ 46 \\ \underline{36} \phantom{0} \\ 10 \end{array}$$

$$\frac{12}{72}$$

$$\frac{766}{12}$$

$$\frac{12}{48}$$

$$\frac{12}{36}$$

$$63 \frac{5}{6}$$

$$63 \frac{10}{12} = \frac{5}{6}$$

~~$$\frac{10}{12} = \frac{5}{6}$$~~

$$\begin{array}{r} 63 \\ 12 \overline{) 756} \\ \underline{126} \phantom{0} \\ 630 \\ \underline{756} \phantom{0} \\ 0 \end{array}$$

- 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

$$\frac{k^2 + 2kt + t^2 - p^2 + 7}{k^2 + 2kt + t^2 - p^2 + 7}$$

$$(kt + p)^2 - 2p(kt + p) + 7$$

$$(kt + p)(kt + p)$$

$$(kt)^2 + pkt + pkt + p^2$$

$$(kt)^2 + 2pkt + p^2$$

$$-2p(kt + p)$$

$$-2pkt - 2p^2$$

$$(kt) \cdot (kt)$$

$$k^2 + kt + kt + t^2$$

$$kt^2 + 2pkt + p^2 + 7$$

$$kt^2 - p^2 + 7$$

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

$$3x - 5 = y$$

~~$$(0, -5)$$~~

 $y =$ 

$$3x - 5$$

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

~~$$3x + 3$$~~

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

$$x = 3 \quad 3x + 3 =$$

 $y =$ 

$$3x + 3$$

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

$$\begin{array}{r} 5x - 10 = -3x + 6 \\ +10 \qquad +10 \end{array}$$

~~$$5x - 3x + 16$$~~

 $(x, y) =$ 

$$2, 0$$

$$\begin{array}{r} 5x = -3x + 16 \\ +3x \quad +3x \end{array}$$

$$8x = 16$$

$$x = 2$$

$$5(2) - 10 = 0$$

$$-3(2) + 6 = 0$$



## Quiz 3

Name:

Zoe Albornoz

Perm Number:

6497796

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

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{- 72} \phantom{6} \\ 46 \end{array}$$

$$\begin{array}{r} 12 \\ 63 \overline{) 766} \\ \underline{- 720} \\ 46 \end{array}$$

$$\begin{array}{r} 766 \\ - 756 \\ \hline 10 \end{array}$$

$$\frac{766}{12}$$

$$63 \frac{10}{12}$$

$$\rightarrow 63 \frac{5}{6}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{- 720} \\ 46 \end{array}$$

$$\begin{array}{r} 383 \\ 6 \overline{) 766} \\ \underline{- 720} \\ 46 \end{array}$$

$$\frac{383}{6} = \frac{766}{12}$$

$$63 \frac{5}{6}$$

2) Substitute  $x = kt + p$  into

$$\frac{x^2 - 2px + 7}{1}$$

Simplify the result as much as possible.

When you're done, write the result of this simplification here  $\longrightarrow$

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

$$\begin{aligned} & (kt + p)^2 - 2p(kt + p) + 7 \\ & k^2 t^2 + \cancel{2kt p} + p^2 - \cancel{2kt p} - 2p^2 + 7 \\ & k^2 t^2 - p^2 + 7 \end{aligned}$$

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

$$y = 3x - 5$$

$$y = 3x - 5$$

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

$$6 = 3(1) + b$$

$$6 = 3 + \textcircled{3}$$

$$y = 3x + 3$$

$$y = 3x + 3$$

$$y = 3(1) + 3$$

$$= 6$$

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

$$y = y$$

$$\rightarrow 5x - 10 = -3x + 6$$

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

$$8x = 16$$

$$x = \frac{16}{8} = \textcircled{2}$$

$$(x, y) = (2, 0)$$

$$y = 5(2) - 10 = 10 - 10 = \textcircled{0}$$

$$y = -3(2) + 6 = -6 + 6 = \textcircled{0}$$

## Quiz 3

Name:

Desiree Espinoza

Perm Number:

4736211

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

$$\frac{766}{12}$$

$$\frac{766}{12}$$

$$\begin{array}{r} 63 \frac{5}{6} \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \\ 10 \\ 5 \overline{) 10} \\ \underline{12} \end{array}$$

$$63 \frac{5}{6}$$

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

$$kt + 5p^2$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$kt + p^2 + 2p$$

$$kt + 2p^2 - 7$$

$$kt + 5p^2$$

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

$$y = mx + b$$

$$y = 3x - 5$$

$$y = 3x + (-5)$$

 $y =$ 

$$3x - 5$$

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

$$y = mx + b$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$y = 3x + 6$$

 $y =$ 

$$3x + 3$$

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

$$y = 5x - 10$$

$$y = -3x + 6$$

 $(x, y) =$ 

$$(2, 3)$$