

## 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).

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

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

$$\begin{array}{r} 80 \quad 60 \\ \hline 12 \quad 12 \\ \hline 960 \quad 720 \\ \hline 1680 \end{array}$$

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

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

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

- 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  $(1, 6)$ .

$$\begin{array}{r} 6 = 3(1) + b \\ -3 \quad 3 \\ \hline \end{array}$$

$$3 = b$$

$y =$

$$3x + 3$$

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

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

$$\boxed{2 = x}$$

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

$$\begin{array}{l} 0 = 5(2) - 10 \\ 0 = 0 \\ \checkmark \end{array}$$

$$\begin{array}{l} 0 = -3(2) + 6 \\ 0 = 0 \\ \checkmark \end{array}$$

$(x, y) =$

$$(2, 0)$$

## 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).

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

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

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

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

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

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

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  $(1, 6)$ .

$$y = mx + b$$

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

$$6 = 3 + b$$

$$b = 3$$

 $\downarrow$ 

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

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.

$$y = 5x - 10$$

$$y = -3x + 6$$

 $(x, y) =$ 

$$(2, 0)$$

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

$$8x = 16$$

$$x = 2$$

 $\rightarrow$ 

$$y = -3x + 6$$

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

$$y = -6 + 6$$

$$y = 0$$

check ✓

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

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

## Quiz 3

Name:

Christopher Boling

Perm Number:

608 5534

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

$$\frac{766}{12} = \frac{383}{6}$$

$$\begin{array}{r} 63 \\ 5 \\ \hline 315 \end{array}$$

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

$$\begin{array}{r} 383 \\ 2 \overline{) 766} \\ \underline{6} \phantom{00} \\ 16 \phantom{00} \\ \underline{16} \phantom{00} \\ 00 \end{array}$$

$$\begin{array}{r} 12 \\ 3 \overline{) 383} \\ \underline{36} \phantom{00} \\ 23 \phantom{00} \end{array}$$

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

$$\begin{array}{r} 1 \\ 383 \\ \hline 766 \end{array}$$

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

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

$$\begin{array}{r} 63 \\ 6 \\ \hline 378 \end{array}$$

close to 383

$$383 - 378 = 5$$

- 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.

$$y = 5x - 10$$

$$y = -3x + 6$$

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

$$y = 0$$

 $(x, y) =$ 

$$2, 0$$

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

$$+10 \quad +3x$$

$$6 = 8x - 10$$

$$+10 \quad +10$$

$$16 = 8x$$

$$\underline{x = 2}$$

## Name:

Perm Number:

6872899

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

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

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

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

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

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

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

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

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

$$(k+1+p)(k+1+p) - 2pk - 2p^2 + 7$$

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

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

$$\frac{k^2 t^2 + 2k t p + p^2}{-2kp t - p^2} \rightarrow$$

- 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).

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

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

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

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

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

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

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

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

- 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  $(1, 6)$ .

$$y = mx + b$$

$$y = 3x + b$$

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

$$y = 3x + 6$$

 $y =$ 

$$3x + 6$$

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

 $y$ 

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

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

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

$$x = 2$$

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

 $(x, y) =$ 

$$(2, 0)$$

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

$$y = 10 - 10$$

$$y = 0$$

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

$$y = -6 + 6$$

$$y = 0$$

- 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  $(1, 6)$ .

$$y = mx + b$$

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

$$6 = 3 + b$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

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

$$y = 5x - 10$$

$$y = -3x + 6$$

 $(x, y) =$ 

$$(2, 3)$$

## 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).

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

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

$$\begin{array}{r} 63 \frac{9}{6} \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \\ 10 \\ 5 \overline{) 10} \\ 12 \end{array}$$

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

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 →

$$kt + 5p^2$$

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

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

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

$$kt + 5p^2$$

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

$$y = 3x - 5$$

$$y = 3x - 5$$

- 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:

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).

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

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

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

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

- 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

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

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

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

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

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

$$3x - 5 = y$$

~~$$(0, -5)$$~~

 $y =$ 

$$3x - 5$$

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

~~$$3x + 1$$~~

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

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

 $y =$ 

$$3x + 3$$

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

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

~~$$5x - 3x + 16$$~~

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

$$8x = 16$$

$$x = 2$$

 $(x, y) =$ 

$$2, 0$$

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

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

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 \* Quiz 3 \*  
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Name:

JO Haddan

Perm Number:

4700282

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

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

$$\frac{12}{72}$$

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

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

$$\frac{12}{36}$$

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

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

~~10/12~~

$$\begin{array}{r} 63 \\ 12 \overline{) 756} \\ \underline{126} \phantom{0} \\ 630 \\ \underline{756} \phantom{0} \\ 0 \end{array}$$

- 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

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

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

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

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

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

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

$$-2pkt - 2p^2$$

$$\frac{k^2 + 2pkt + p^2 + 7 - 2pkt - 2p^2}{k^2 - p^2 + 7}$$

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

$$(kt) \cdot (kt)$$

$$k^2 + kt + kt + t^2$$



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

$$y = m(x) - 5$$

+5                      +5

y =

$$3(x) - 5$$

$$\frac{y+5}{3} = \frac{m \cdot 3}{3}$$

$$m = \frac{y+5}{3}$$

$$+5 \quad y = m(x) - 5$$

+5

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

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

$$x \quad y \quad 6 = 3 + b$$

-3   -3

$$3 = b$$

2 equations

$$\frac{6}{1} = \frac{3(1) + b}{1}$$

$$6 = m + b \quad 6 = 3 + 3$$

-m   -m

y =

$$3(x) + 3$$

$$6 = 1 + b$$

$$6 - m = b$$

$$6 = m(1) + (6 - m) \quad 6 = 6 + m^2$$

$\sqrt{0} = \sqrt{m^2}$

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

$$\frac{y_2 - y_1}{x_2 - x_1} = \text{slope}$$

$$y = mx + b$$

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

-3                      -3

(x, y) =

$$(2, 0)$$

$$y = 5x - 10$$

$$y = \frac{5}{1} \left( \frac{x+10}{5} \right)$$

\*

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

$$y = \frac{5x + 50}{25} - 10$$

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

$$y = -3x + 6$$

-6                      -6

$$x = \frac{-3x + 18 + 6}{3}$$

3x + 24

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

-24

$$\frac{y-24}{3}$$

## 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).

$$\frac{766}{12} \div \frac{2}{2} = \frac{383}{6} + 300$$

$$383$$

$$383$$

$$+ 300$$

$$\frac{383}{6}$$

$$166$$

$$\frac{383}{6} \div \frac{383}{6}$$

- 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

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

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

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

$$kt^2 + 4p - 2kt + 7$$

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

- 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.

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

$$8x = 16$$

$$x = 2$$

 $(x, y) =$ 

$$(2, 0)$$

## 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).

$$\frac{46}{60} \quad 720$$

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

$$\begin{array}{r} 63 \\ 12 \overline{) 63} \\ 126 \\ \underline{63} \\ 756 \end{array}$$

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

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  $b = -5$ .

$$y = mx + b$$

$$y = 3x + -5$$

 $y =$ 

$$3x - 5$$

- 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.

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

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

$$5x + 3x = 16$$

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

$$x = 2$$

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

$$10 - 10 = 0$$

$$y = 0$$

 $(x, y) =$ 

$$(2, 0)$$

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

$$y = -6 + 6$$

$$y = 0$$



## 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).

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

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

$$\begin{array}{r} 1 \\ 12 \\ 12 \\ 12 \\ 12 \\ \hline 12 \\ \underline{60} \\ 60 \\ \underline{60} \\ 0 \end{array}$$

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

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  $b = -5$ .

$$y = 3x - 5$$

$$y = mx + b$$

$$y = 3x - 5$$

- 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:

Etk 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).

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

$$\begin{array}{r} 63. \\ 12 \overline{) 766.0} \\ \underline{72} \phantom{0} \\ 46 \\ \underline{36} \\ 10/12 \end{array}$$

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

$$\begin{array}{r} 12 \\ 6 \\ \hline 72 \\ + 12 \\ \hline 84 \\ 12 \\ \hline 96 \end{array}$$

$$\begin{array}{r} 12 \\ \times 63 \\ \hline 36 \\ 720 \\ \hline 756 \end{array}$$

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

$$\begin{array}{r} 12 \\ \times 63 \\ \hline 36 \\ 720 \\ \hline 756 \end{array}$$

$$\begin{array}{l} 766 - 756 \\ = 10/12 \\ \checkmark \frac{5}{6} \end{array}$$

$$(k + p)(k + p)$$

- 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

$$k^2 + p^2 + 7$$

$$x = kt + p$$

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

$$kt + kt$$

$$(2p(k + p))$$

$$2ktp + 2p^2$$

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

$$\begin{array}{l} 2p(k + p) \\ 2ktp + 2p^2 \end{array}$$

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

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

$$(k + p)(k + p)$$

$$\begin{array}{l} k^2 + p^2 + ktp + ktp + p^2 \\ \checkmark k^2 + 2ktp + p^2 \end{array}$$

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

$$\begin{array}{l} k^2 + p^2 + \cancel{2ktp} + p^2 - \cancel{2ktp} - \cancel{2p^2} + 7 \\ \checkmark k^2 + p^2 + 7 \end{array}$$

$$k^2 + p^2 + 7$$



- 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  $(1, 6)$ .

$$y = 3x + b$$

$$\frac{6}{3} = \frac{3(1)}{3} + b$$

$$2 = b$$

 $y =$ 

$$3x + 2$$

- 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:

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).

$$12 \overline{) 766.0}$$

$$\underline{72}$$

$$\begin{array}{r} 46 \\ 36 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 8 \\ 112 \\ 8 \\ \hline 96 \end{array}$$

$$12 \overline{) 10.0}$$

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

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

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

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

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

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

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

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

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

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

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

$$y = mx + b$$

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

$$y = 3x - 5$$

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

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

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

$$y = 3x + b \quad (2, 9)$$

$$1 = 18 + b$$

$$y - 6 = 3x - 17$$

$$b = -17 \quad y = \boxed{\cancel{3x - 17} \quad 3x + 3}$$

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

$$y = 3x - 17$$

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

$$9 = 6 - 17$$

$$y = 3x + 3$$

$$b = 3 + 3 = 6$$

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

$$(0, -10), (0, 6)$$

$$(1, -5), (1, 3)$$

$$(2, 0), (2, 0)$$

$$(x, y) =$$

$$\boxed{(2, 0)}$$

## Quiz 3

Name:

Marc Nunez

Perm Number:

8047103

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

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

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

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

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

- 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 →

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

$$\begin{aligned} (k+p)^2 - 2p(k+p) + 7 \\ - \cancel{2pk} - \cancel{2p^2} + 7 \end{aligned}$$

$$(k+p)(k+p)$$

$$k^2t^2 + ktp - \cancel{pk} - \cancel{p^2}$$

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

- 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  $(1, 6)$ .

$$y = 3x + b$$

$$6 = 3 + b$$

$$3 = b$$

 $y =$ 

$$3x + 3$$

- 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:

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).

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

$$12 \times 60 = 720$$

$$12 \times 3 = 36$$

$$756$$

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

$$\begin{array}{r} 63 \\ \times 12 \\ \hline 126 \\ 756 \\ \hline 766 \end{array}$$

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

- 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 →

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

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

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

- 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.

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

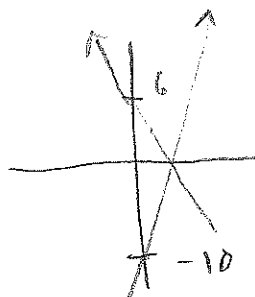
$$8x = 16$$

$$x = 2$$

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

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

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



## Quiz 3

Name:

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

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

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

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

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

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

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

k



- 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  $(1, 6)$ .

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

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

$$y = 3x + 3$$

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

$$= 3x - 3 + 6$$

$$y = 3x + 3$$

$$3x - 3$$

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

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

$$= -6 + 6$$

$$y = 0$$

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

$$= 10 - 10$$

$$y = 0$$

## 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  $b = -5$ .

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

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

$$(1, 6)$$

$$y = \boxed{\frac{1}{2}x + \frac{5}{2}}$$

$$\begin{aligned} 6 &= 3x + b \\ y &= \frac{1}{2}x + \frac{5}{2} \end{aligned}$$

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

$$\begin{aligned} x &= 2 \\ y &= 10 - 10 \\ (x, y) &= \boxed{2, 5} \end{aligned}$$

$$\begin{aligned} 5 &= -2x + 6 \\ 1 &= -2x \end{aligned}$$

$$\begin{aligned} 1 &= 5x - 10 \\ 11 &= 5x \end{aligned}$$

$$\begin{aligned} 5 &= 5x - 10 \\ 15 &= 5x \\ x &= 3 \end{aligned}$$

$$\begin{aligned} -3 &= 5x - 10 \\ 5 &= 5x \\ x &= 1 \\ -5 &= -2x + 6 \\ -11 &= -2x \\ 1 &= -2x + 6 \\ 5 &= 5x - 10 \\ -2 &= -2x \\ x &= 1 \\ 2 &= 5x - 10 \\ 12 &= 5x \\ 3 &= 5x \end{aligned}$$

## 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).

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

$$\begin{array}{r} 063.83 \\ 12 \overline{) 7660} \\ \underline{-72} \phantom{0} \\ 46 \phantom{0} \\ \underline{-36} \phantom{0} \\ 100 \\ \underline{-96} \\ 40 \\ \underline{-36} \\ 4 \end{array}$$

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

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

$$\begin{aligned} k^2t^2 + kpt + kpt + p^2 - 2px + 7 \\ k^2t^2 + 2kpt + p^2 \end{aligned}$$

- 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

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

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

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

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

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

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

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

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

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

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

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

$$y = mx + b$$

$$3x + -5$$

y =

$$3x - 5$$

- 4) Find the equation of a line with slope  $m = 3$  passing through the point  $(1, 6)$ .  $(2, 9)$

$$y = 3x + b$$

Slope  $\frac{3}{1}$

y =

$$3x + 2$$

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

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

$$y = 2$$

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

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

$$+3x + 10 \quad +3x + 10$$

(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:

Candice Morenc

Perm Number:

8930998

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).

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

$$766 \cdot 12$$

6.2

- 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

$$\boxed{\cancel{k^2 t^2} + 2ktp}$$

$$\boxed{K^2 t^2 - 1 p^2}$$

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

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

$$K^2 t^2 + kt p + kt p + p^2$$

$$K^2 t^2 + 2kt p + p^2 - 2kt p - 2p^2$$

$$\boxed{K^2 t^2 - p^2}$$

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

$$y = mx + b$$

$$y = 3x + -5$$

$$y = 3x + -5$$

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

$$y = mx + b$$

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

$$b = 3 + b$$

$$-3 \quad -3$$

$$3 = b$$

$$\text{equation} \rightarrow y = 3x + 3$$

$$y = 3x + 3$$

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

$$y = 5x - 10$$

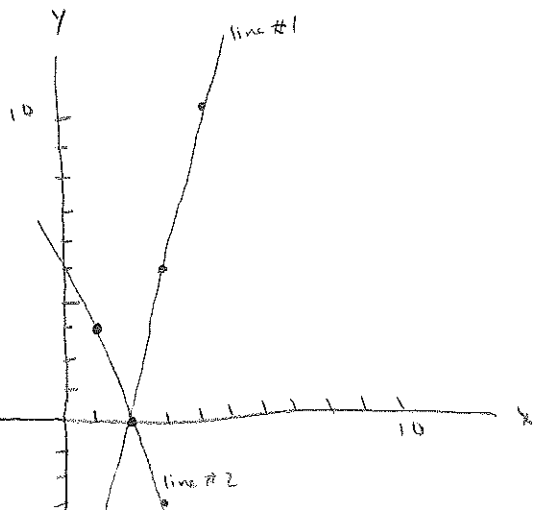
$$\begin{aligned} \text{when } x = 2, y &= 0 \\ x = 3, y &= 5 \\ x = 4, y &= 10 \end{aligned}$$

$$y = -3x + 6$$

$$\begin{aligned} \text{when } x = 2, y &= 0 \\ \text{when } x = 1, y &= 3 \\ \text{when } x = 3, y &= -3 \end{aligned}$$

$$(x, y) =$$

$$(2, 0)$$



## 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).

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

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

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

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

$$\begin{array}{r} 383 \\ 1 \overline{) 766} \\ \underline{766} \\ 0 \end{array}$$

$$\frac{383}{6}$$

$$\begin{array}{r} 191 \\ 2 \overline{) 382} \\ \underline{382} \\ 0 \end{array}$$

$$\begin{array}{r} 191 \\ 3 \overline{) 573} \\ \underline{573} \\ 0 \end{array}$$

$$\begin{array}{r} 63 \\ 3 \overline{) 191} \\ \underline{186} \\ 5 \end{array}$$

$$\rightarrow 63 \frac{5}{3} ?$$

$$\rightarrow 191$$

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

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

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

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

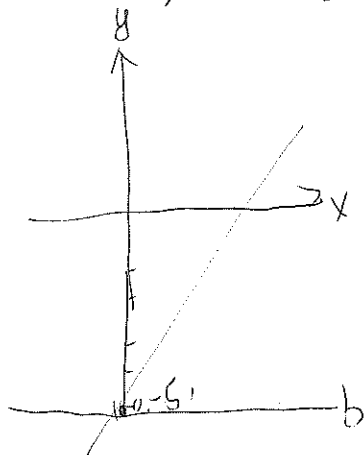
$$k^2 + kp + kp + p^2 - 2p(k+p) + 7$$

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

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



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



$$y = 3x + b$$

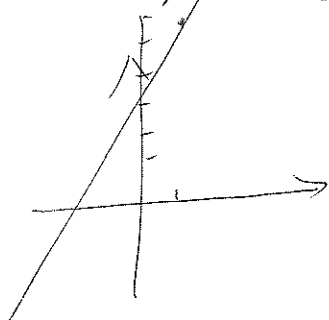
$$3x_0 + b = -5$$

$$b = -5$$

$$y = 3x - 5$$

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

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



$$3x + b = y$$

$$3 \cdot 1 + b = 6$$

$$b = 3$$

$$y = 3x + 3$$

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

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

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

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

$$8x = 16$$

$$x = 2$$

$$5 \times 2 - 10 = 0$$

$$-3 \times 2 + 6 = 0$$

$$y = 0$$

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

## Quiz 3

Name:

~~Anyi~~ 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).

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

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

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

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

$$\begin{array}{r} 63 \\ 46 \\ \hline 378 \end{array}$$

$$\begin{array}{r} 383 \\ 2 \overline{) 766} \\ \underline{6} \phantom{0} \\ 16 \\ \underline{16} \\ 0 \end{array}$$

$$\begin{array}{r} 383 \\ 6 \phantom{0} \\ \hline 378 \\ \hline 5 \end{array}$$

- 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 →

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

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

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

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

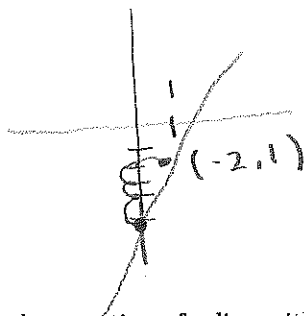
- 3) Find the equation of a line with slope  $m = 3$  and  $y$ -intercept  $b = -5$ .

$$y = mx + b$$

$$y = 3x - 5 \quad \text{with point } (0, -5)$$

$$\frac{\text{rise}}{\text{run}} = \frac{3}{1}$$

$$y = 3x - 5$$



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

$$y = 3x + b$$

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

$$y = 3x + 3$$

$$6 = 3 + b$$

$$-3 \quad -3$$

$$b = 3 \quad \uparrow \quad y = 3x + 3$$

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

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

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

$$8x = 16$$

$$\frac{8}{8} \quad \frac{16}{8}$$

$$x = 2$$

plug in  $\uparrow$

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

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

$$y = -6 + 6$$

$$y = 0$$

## 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):

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

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

$$\begin{array}{r} 12 \\ \times 5 \\ \hline 60 \end{array}$$

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

$$\begin{array}{r} 12 \\ \times 4 \\ \hline 48 \end{array}$$

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

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

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

$$\begin{array}{r} 63 \frac{5}{6} \\ \times 6 \\ \hline 384 \phantom{0} \\ + 5 \phantom{0} \\ \hline 389 \end{array}$$

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array} \quad \begin{array}{r} 12 \\ \times 3 \\ \hline 36 \end{array} \quad \begin{array}{r} 12 \\ \times 4 \\ \hline 48 \end{array}$$

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

$$\begin{array}{r} 12 \\ \times 8 \\ \hline 96 \end{array}$$

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

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

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

$$\begin{array}{r} kt^2 + ktp + ktp + p^2 \\ \hline kt^2 + 2ktp + p^2 \end{array}$$

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

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

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

$$y = mx + b$$

$$y = 3x - 5$$

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

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

$$y = mx + b$$

$$y = 3x + 6$$

$$y = \boxed{3x + 6}$$

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

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

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

$$x = 2$$

$$(x, y) =$$

$$\boxed{(2, 0)}$$

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

$$y = 10 - 10$$

$$y = 0$$

$$(2, 0)$$

## 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).

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

$$\frac{766}{12} = 10 \frac{43}{12} \div 3 = \frac{21}{4} = 10 \frac{21}{4}$$

$$10 \frac{21}{4}$$

$$\begin{array}{r} 5 \\ 4 \overline{) 21} \\ \underline{-20} \\ 1 \end{array} = 1 \frac{5}{4}$$

- 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
- $(1, 6)$
- .

$$y = mx + b$$

$$y = 3x + b$$

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

$$6 = 3 + b$$

$$\begin{array}{r} 6 \\ - 3 \\ \hline 3 \end{array}$$

$$3 = b$$

$$y = 3x + 3$$

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

$$6 = 3 + 3$$

$$6 = 6 \checkmark$$

$$y = 3x + 3$$

- 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:

Victoria McNabb

Perm Number:

5171038

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

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

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

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

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

- 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

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

$$\begin{aligned} k &= 1 \\ t &= 2 \\ p &= 3 \end{aligned}$$

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

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

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

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

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

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

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

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

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

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

$$\begin{array}{r} 12 \overline{) 766} \\ \underline{84} \phantom{00} \\ 82 \phantom{00} \\ \underline{84} \phantom{00} \\ 2 \phantom{00} \end{array}$$

$$\frac{12}{36}$$

$$\begin{array}{r} 63 \overline{) 766} \\ \underline{720} \phantom{00} \\ 46 \phantom{00} \\ \underline{36} \phantom{00} \\ 10 \phantom{00} \end{array}$$

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

$$\begin{array}{r} 12 \overline{) 766} \\ \underline{36} \phantom{00} \\ 72 \phantom{00} \\ \underline{756} \phantom{00} \\ 10 \phantom{00} \end{array}$$

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



- 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  $(1, 6)$ .

$$y = mx + b$$

$$y = 3x + b$$

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

$$3 = 3 + b$$

$$-3 - 3$$

$$3 = b$$

$$y = 3x + 3$$

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

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

$$+3x + 10 \quad +3x + 10 \quad y = 10 - 10$$

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

$$y = 0$$

$$(x, y) =$$

$$(2, 0)$$

$$x = 2$$

$$y = 0$$

## 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).

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

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 46 \\ \underline{-36} \\ 100 \end{array}$$

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

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

$$\begin{array}{r} 383 \\ 2 \overline{) 766} \\ \underline{-6} \phantom{0} \\ 16 \\ \underline{-16} \\ 00 \end{array}$$

$$\frac{383}{6}$$

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

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 →

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

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

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

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

$$\begin{array}{c} kt \quad p \\ \begin{array}{|c|c|} \hline kt^2 & ktp \\ \hline ktp & p^2 \\ \hline \end{array} \end{array}$$

- 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  $(1, 6)$ .

$$\begin{matrix} (1, 6) \\ x \quad y \end{matrix}$$

$$y = mx + b$$

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

$$6 = 3 + b$$

$$3 = b$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

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

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

$$= 10 - 10$$

$$y = 0$$

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

$$= -6 + 6$$

$$y = 0$$

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

$$\begin{matrix} 5x & = & -3x + 16 \\ +3x & & +3x \end{matrix}$$

$$8x = 16$$

$$x = 2$$

$$(2, 0)$$

 $(x, y) =$ 

$$(2, 0)$$

## 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 steps:  $\frac{766}{12} = \frac{383}{6}$ , then  $\frac{383}{6} = 63 \frac{5}{6}$ .

$$12 \overline{) 766}$$

Handwritten long division showing 63 with a remainder of 10, which is then simplified to  $63 \frac{5}{6}$ .

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

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

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

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

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

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

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

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

$$- p^2$$

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

$$kt - p + \sqrt{7}$$

$$p = x - kt$$

$$\begin{matrix} kt & p \\ k(kt)^2 & ktp \\ p & ktp \\ p^2 & p^2 \end{matrix}$$

$$\begin{matrix} k & t \\ k & t^2 \\ t & kt \\ t & t^2 \end{matrix}$$

- 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  $(1, 6)$ .

$$(1, 6) \quad m = 3$$

$$y = mx + b$$

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

$$6 = 3 + b$$

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

$$3 = b$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

$$y = 3x + 3$$

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

$$6 = 3 + 3$$

$$6 = 6 \quad \checkmark$$

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

$$y = 5x - 10$$

$$\frac{\text{rise}}{\text{run}} = \frac{5}{1}$$

$$b = -10$$

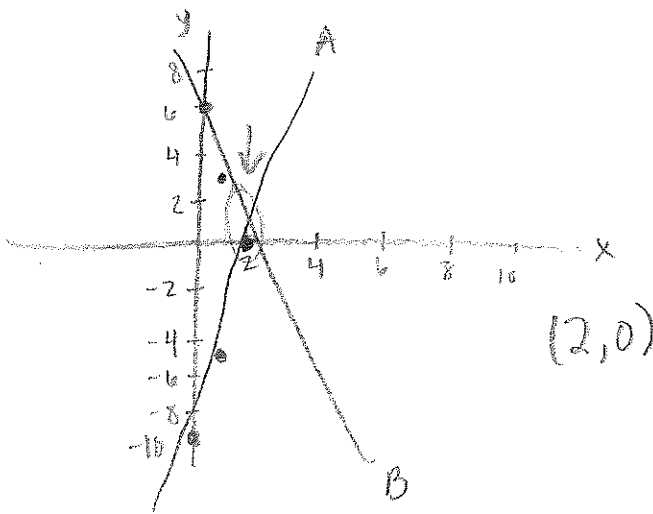
$$y = -3x + 6$$

$$\frac{\text{rise}}{\text{run}} = -\frac{3}{1}$$

$$b = 6$$

 $(x, y) =$ 

$$(2, 0)$$



$$y = 5x - 10$$

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

$$0 = 10 - 10$$

$$0 = 0$$

 $\checkmark$ 

$$y = -3x + 6$$

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

$$0 = -6 + 6$$

$$0 = 0$$

 $\checkmark$

## Quiz 3

Name:

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).

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

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

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

$$\begin{array}{r} 33 \\ \times 12 \\ \hline 66 \\ 33 \\ \hline 396 \end{array}$$

$$\begin{array}{r} 33 \\ \times 12 \\ \hline 66 \\ 33 \\ \hline 396 \end{array}$$

$$\begin{array}{r} 66 \\ \times 12 \\ \hline 132 \\ 66 \\ \hline 792 \end{array}$$

$$\begin{array}{r} 60 \\ \times 12 \\ \hline 120 \\ 60 \\ \hline 720 \end{array}$$

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

$$\begin{array}{r} 64 \\ \times 12 \\ \hline 128 \\ 64 \\ \hline 768 \end{array}$$

→ 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  $(1, 6)$ .

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

$$-3 \quad -3$$

$$3 = b$$

 $y =$ 

$$3x + 3$$

$$y = 3x + 3$$

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

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

$$+3x + 10 \quad +3x + 10$$

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

$$x = 2$$

 $(x, y) =$ 

$$(2, 0)$$

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

$$10 - 10$$

$$y = 0$$

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

$$y = -6 + 6 = 0$$

## 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

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

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

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

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

	$kt$	$p$
$kt$	$(kt)^2$	$ktp$
$p$	$ktp$	$p^2$



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

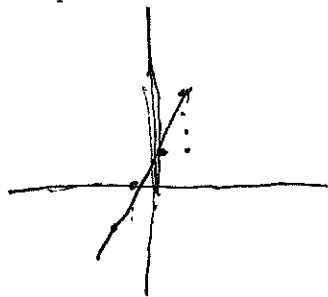
$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

 $y =$ 

$$3x + 3$$

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

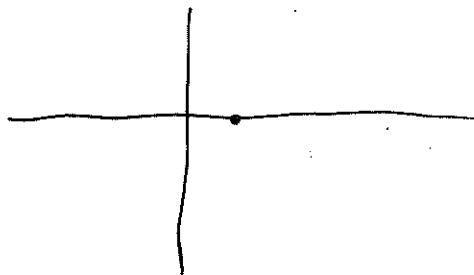
$$5x - 10 = -3x + 6$$

$$8x = 16$$

$$x = 2$$

 $(x, y) =$ 

$$(2, 0)$$



## Quiz 3

Name:

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).

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

$$12 \overline{) 766000} \begin{array}{r} 63 \text{ R } 3 \\ 766 \\ \underline{410} \\ 44 \end{array}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{126} \\ 630 \\ \underline{756} \end{array}$$

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

- 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

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

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

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

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

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

$$\begin{array}{r} (10)^2 - (8)^2 + 9 \\ 10 - 8 + 3 = 5 \end{array}$$

- 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.

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

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

$$8x = 16$$

$$x = 2$$

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

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

$$y = 0$$

## 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).

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

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

$$\frac{383}{6}$$

$$\begin{array}{r} 2 \overline{) 766} \\ \underline{4} \phantom{0} \\ 366 \\ \underline{36} \\ 6 \end{array}$$

$$63 \frac{10}{12} \text{ or } 63 \frac{5}{6}$$

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

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

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

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

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

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

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

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

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

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

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

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

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

- 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  $(1, 6)$ .

$x \ y$

$$y = mx + b$$

$$y = 3x + b$$

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

$$6 = 3 + b$$

$$-3 \quad -3$$

$$3 = \boxed{b}$$

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

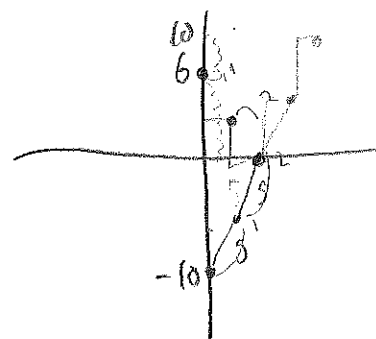
- 5) Find the point where the lines with equations  $y = 5x - 10$  and  $y = -3x + 6$  cross.

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

$$(x, y) =$$

$$\boxed{(2, 0)}$$

$$10 = 10$$



## 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).

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

$$12 \times 50 = 600$$

$$12 \times 12 = 144 + 12$$

$$12 \times 62 = 744 \quad 156$$

$$12 \times 63 = 756 \frac{10}{12}$$

$$\begin{array}{r} 720 \\ + 36 \\ \hline 756 \end{array} + \frac{10}{12} = 766$$

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

close one

- 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 →

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

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

$$2 \cdot 5 \cdot 2 = 30$$

$$2 \cdot 5 \cdot 3 = 30$$

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

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

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

- 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  $(1, 6)$ .

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

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

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

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

- 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:

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).

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

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

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

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

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

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

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

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

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

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

- 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

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

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

$$\begin{aligned} & (kt+p)(kt+p) \\ & (kt)^2 + kt p + kt p + p^2 \\ & (kt)^2 + 2kt p + p^2 \end{aligned}$$

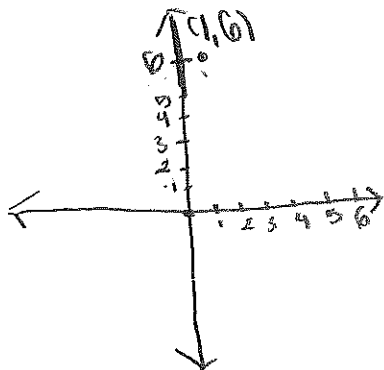


- 3) Find the equation of a line with slope  $m = 3$  and  $y$ -intercept  $b = -5$ .

$$y = 3x - 5$$

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

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



$$6 = 3x + b$$

$$y = 3x + b$$

$$6 = 3 + b$$

$$3 = b$$

$\emptyset$

$$y = 3 + 3$$

$$y = 6$$

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

$$6 = 3x + 3$$

$$3 = 3x$$

$$x = 1$$

- 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:

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).

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

$$\begin{array}{r} 63. \\ 12 \overline{) 766.0} \\ \underline{-720} \phantom{0} \\ 46 \phantom{0} \\ \underline{-36} \phantom{0} \\ 100 \phantom{0} \end{array}$$

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

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

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

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

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  $b = -5$ .

$$y = 3x - 5$$

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

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

$$y = 3x + 3$$

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

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

$$\begin{aligned} 8x - 10 &= 6 \\ +10 &+10 \end{aligned}$$

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

$$x = 2$$

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

## 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 leftover

$$64 \frac{1}{6}$$

- 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

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

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

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

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

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

 $y =$ 

$$3x - 5$$

- 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:

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  $b = -5$ .

$$y = mx + b$$

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

 $y =$ 

$$3x - 5$$

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

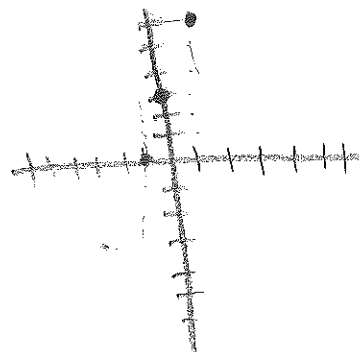
$$y = \frac{3x}{1}$$

$$6 = 3 \cdot 1$$

$$b = 3x$$

$$b = 3 \cdot 1 = 3$$

$$y = 3x + 3$$



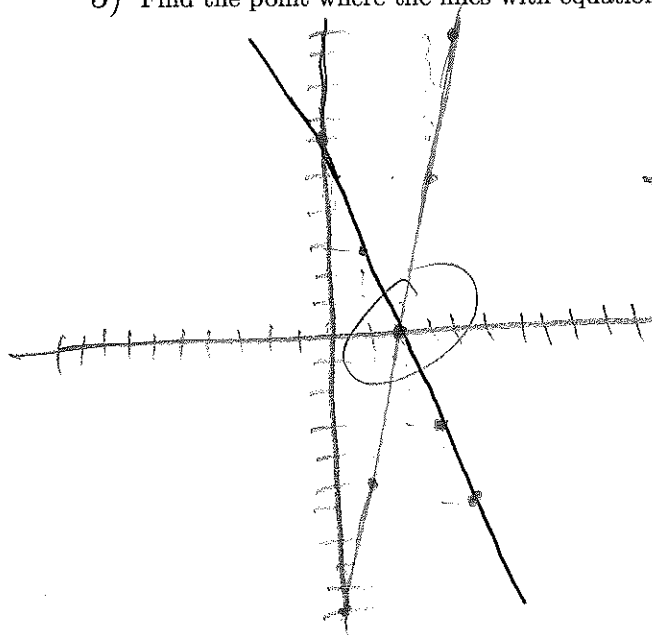
- 5) Find the point where the lines with equations  $y = 5x - 10$  and  $y = -3x + 6$  cross.

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

$$0 = 0 \checkmark$$

 $(x, y) =$ 

$$(2, 0)$$



## Quiz 3

Name:

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).

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

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{126} \\ 630 \\ \underline{756} \end{array}$$

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

$$\begin{array}{r} 12 \\ \times 10 \\ \hline 120 \end{array}$$

$$12$$

$$10 \times 120$$

$$20 = 240$$

$$40 = 480$$

$$60 = 720$$

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

$$\begin{array}{r} 12 \\ \times 4 \\ \hline 48 \end{array}$$

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

$$\begin{array}{r} 720 \\ \times 26 \\ \hline 14400 \end{array}$$

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

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

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

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

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

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

$$-2ptk - 2p^2 + 7$$

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



- 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  $(1, 6)$ .

$$y = 3x + b$$

$$6 = 3 + b$$

$$b = 3$$

 $y =$ 

$$3x + 3$$

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

$$y = 5x - 10$$

$$y = -3x + 6$$

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

$$8x = 16$$

$$x = 2$$

$$5(2)$$

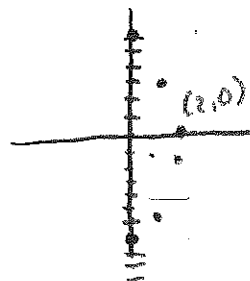
$$\downarrow$$

$$y = 10 - 10$$

$$y = 0$$

 $(x, y) =$ 

$$(2, 0)$$



## Quiz 3

Name:

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

$$\begin{array}{r} 63.83 \\ 12 \overline{) 766.00} \\ \underline{72} \phantom{00} \\ 46 \phantom{00} \\ \underline{36} \phantom{00} \\ 10.0 \\ \underline{96} \phantom{00} \\ 40 \phantom{00} \\ \underline{36} \phantom{00} \\ 4 \end{array}$$

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

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

$$5 \overline{) 6}$$

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

$$\begin{array}{r} 12 \\ \times 8 \\ \hline 96 \end{array}$$

- 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  $m = 3$  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  $(1, 6)$ .

$$y = 3x + b$$

$$3 + b = 6$$

$$b = 3$$

$$y = 3x + 3$$

$$y = 3x + 3$$

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

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

$$8x = 16$$

$$x = 2 \quad y = 0$$

$$(x, y) =$$

$$(2, 0)$$



## Quiz 3

Name:

Sophia (Yunwen) 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).

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

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

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

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

✓

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{126} \phantom{0} \\ 63 \\ \underline{756} \end{array}$$

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{126} \phantom{0} \\ 63 \\ \underline{756} \end{array}$$

$$\begin{array}{r} 63 \\ 6 \overline{) 378} \\ \underline{36} \phantom{0} \\ 18 \\ \underline{18} \\ 0 \end{array}$$

$$\begin{array}{r} 383 \\ 12 \overline{) 766} \\ \underline{766} \\ 0 \end{array}$$

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

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

$$\begin{array}{r} 383 \\ 12 \overline{) 766} \\ \underline{766} \\ 0 \end{array}$$

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 →

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

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

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

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

✓

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

- 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  $\overset{x}{(1, 6)} \overset{y}{}$ .

$$y = mx + b$$

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

$$6 = 3 + b$$

$$-3 \quad -3$$

$$3 = b$$

$y =$

$$3x + 3$$

$$y = 3x + 3$$

- 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:

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).

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

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

$$\begin{array}{r} 12 \overline{) 766} \\ 12 \overline{) 766} \\ 12 \overline{) 766} \\ 12 \overline{) 766} \\ 12 \overline{) 766} \\ 12 \overline{) 766} \\ 12 \overline{) 766} \\ 12 \overline{) 766} \\ 12 \overline{) 766} \\ 12 \overline{) 766} \end{array}$$

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

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

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  $b = -5$ .

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

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

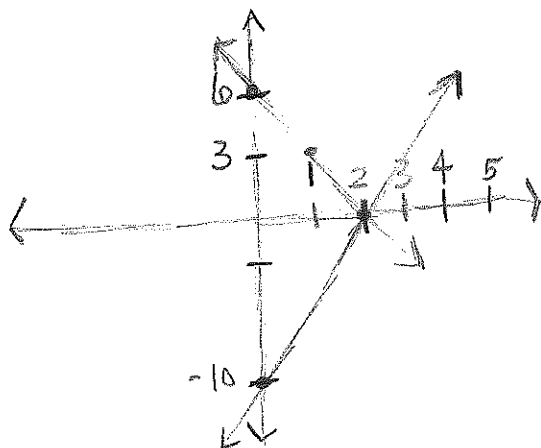
$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$3 = b$$

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

- 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:

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).

$$\begin{array}{r} 12 \\ 4 \end{array}$$

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

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

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

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

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

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  $b = -5$ .

$$y = mx + b$$

↓

$$y = 3x - 5$$

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

- 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.

$$y = 5x - 10$$

$$y = -3x + 6$$

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

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

$$8x = 16$$

$$x = 2$$

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

$$y = 0$$

check

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

$$y = 0$$

## 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).

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

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

$$12 \overline{) 766}$$

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

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

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

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

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

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

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

$$12 \overline{) 766}$$

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

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

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

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

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

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

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

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

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

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

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

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

- 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  $(1, 6)$ .

$$y = mx + b$$

$$y = 3x + b$$

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

$$6 = 3 + b$$

$$3 = b$$

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

$$3 + 3$$

$$y = 6$$

$$y = 3x + 3$$

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

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

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

$$x = 2$$

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

$$y = 10$$

$$y = -10$$

$$0 = 5x - 10$$

$$10 = 5x$$

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

$$10 - 10$$

$$y = 0$$

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

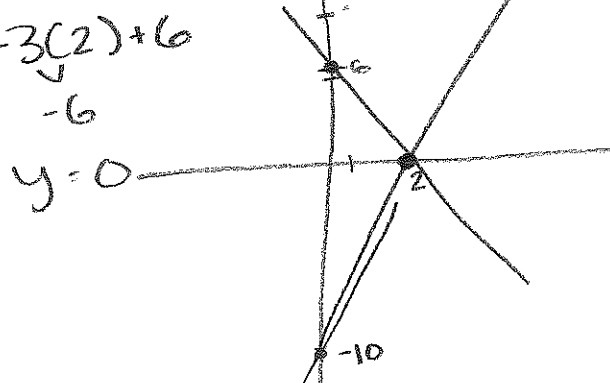
$$-6 + 6$$

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

$$-6 = -3x \quad +2$$

$$(x, y) =$$

$$(2, 0)$$



## 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).

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

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

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

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

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

$$140 \frac{63}{12}$$

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

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

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

- 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  $b = -5$ .

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

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

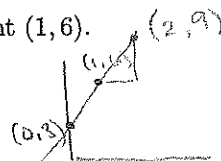
- 4) Find the equation of a line with slope  $m = 3$  passing through the point  $(1, 6)$ .

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

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

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

$$y = 3x + 3$$



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

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

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

$$8x = 16$$

$$x = 2$$

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

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

$$y = 10 - 10$$

$$y = 0$$

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

$$y = -6 + 6$$

$$y = 0$$



## 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).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$y = 3x - 5 \quad \leftarrow \text{woman seems 2024} =$$

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

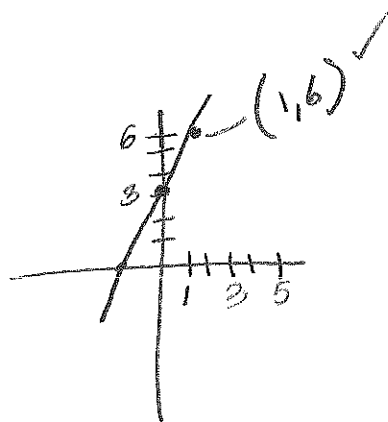
- 4) Find the equation of a line with slope  $m = 3$  passing through the point  $(1, 6)$ .

$$y = 3x + b$$

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

$$6 = 3 + b$$

$$3 = b$$



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

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

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

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

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

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

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

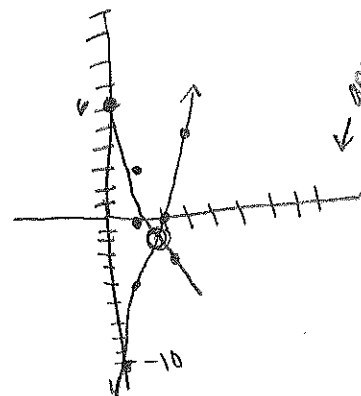
$$\boxed{\left(\frac{2}{3}, -\frac{20}{3}\right)}$$

$$\frac{8x}{4} = \frac{4}{6}$$

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

$$\frac{10}{3} - \frac{10 \cdot 2}{3} = \frac{10 - 20}{3} = -\frac{10}{3}$$

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



$\leftarrow$  ? man m

$\leftarrow$  woman seems to graph :)

## 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).

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

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 40 \\ \underline{-36} \\ 4-R \end{array}$$

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

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

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

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

- 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 →

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

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

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

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

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

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



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

$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

- 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.

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

$$8x = 16$$

$$x = 2$$

$$y = 0$$

 $(x, y) =$ 

$$2, 0$$

## 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).

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

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

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{126} \\ 560 \\ \underline{560} \\ 0 \end{array}$$

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

$$\begin{array}{r} 63 \\ 6 \overline{) 378} \\ \underline{360} \\ 18 \end{array}$$

$$\begin{array}{r} 383 \\ 6 \overline{) 766} \\ \underline{720} \\ 46 \end{array}$$

- 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 →

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

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

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

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

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

- 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.

$$\begin{aligned} -3x + 6 &= 5x - 10 \\ +3x + 10 &+3x + 10 \\ \hline 16 &= 8x \\ \frac{16}{8} &= \frac{8x}{8} \\ x &= 2 \end{aligned}$$

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

$$\begin{aligned} y &= 5(2) - 10 \\ y &= 0 \end{aligned}$$

## 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).

$$\frac{766}{12} = 12 \cdot 60 + \frac{766 - 720}{12} = 12 \cdot 60 + \frac{46}{12}$$

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

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

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

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

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

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

$$\begin{array}{r} 62 \\ 12 \\ \hline 124 \\ 620 \\ \hline 744 \end{array}$$

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

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

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

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

$$\begin{array}{r} 12 \\ 756 \\ \hline \end{array} = 12 \cdot 63$$

- 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 →

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

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

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

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

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

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

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

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

$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

- 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:

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).

$$12 \overline{) 766} \quad \frac{63}{12}$$

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

$$\frac{63}{12} = \frac{63 \div 3}{12 \div 3} = \frac{21}{4}$$

$$12 \overline{) 766} \quad \frac{63}{12}$$

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

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

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

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

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

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 →

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

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

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

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

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

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

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

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

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

$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

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

$$y = 3 + b$$

 $y =$ 

$$3 + b$$

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

$$y = 5x - 10$$

$$y = -3x + 6$$

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

$$y = 10 - 10$$

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

$$0 = 10 - 10$$

 $(x, y) =$ 

$$2, 0$$

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

$$\frac{-3x}{-3} = \frac{5x - 16}{-3}$$

$$x = 2$$

$$x = \frac{-3x}{-3} = \frac{5x - 16}{-3}$$

$$-8x = -16$$

## Name:

Perm Number:

4984886

- $$\begin{array}{r} 01^2 \\ 12 \overline{) 176} \\ \underline{064} \\ 21 \end{array} \quad \begin{array}{r} 64^8 \\ 12 \end{array} \quad \begin{array}{r} 766 \\ \underline{12} \end{array} \quad \begin{array}{r} \cancel{176} \\ \underline{176} \\ 0 \end{array}$$

6473

$$\begin{array}{r} 05 \\ 12 \overline{) 776} \\ \underline{72} \end{array}$$

73

~~63 5/6~~ 63 5/6

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

63  $\frac{5}{6}$

64.66 72

63  
x 12

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

~~$$\begin{array}{r} 17 \\ \times 12932 \\ \hline 66660 \\ 64660 \\ \hline 77.542 \end{array}$$~~

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

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

$$Kt^2 + Ktp - 2Kpt + 7$$

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

$$(k+p)(k+p)$$

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

$$k t^2 + k t p + k t p + p^2$$

$$k^2 + k\rho^2 + \rho^2 - 2k\rho t - 2\rho^2 + 7$$

$$k^2 + k^2 - 2kp + 7$$



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

$$y = mx + b$$

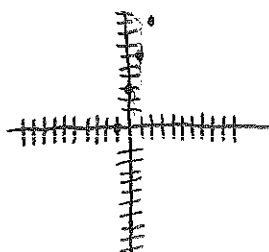
$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

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

$$y = mx + b$$



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

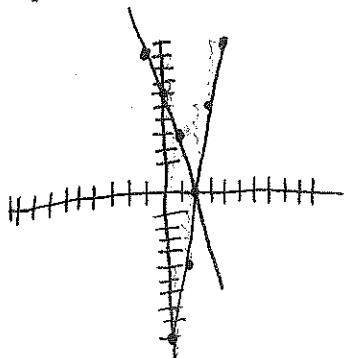
$$y - 6 = 3x - 3$$

$$+6 \quad +6$$

$$y = 3x + 3$$

$$3x + 3$$

- 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:

Samantha Stevens

Perm Number:

5113980

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

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

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

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

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

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

- 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 →

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

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

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

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

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

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

$$(k+p)(k+p)$$

$$k^2 + k + p + k + p + p^2$$

$$k^2 + \cancel{2kp} + p^2$$

$$-2p(k+p) = -2kp - 2p^2$$

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

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

- 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: 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).

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

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

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

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

$$x = kt + p$$

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

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

- 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  $(1, 6)$ .

$$y = mx + b$$

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

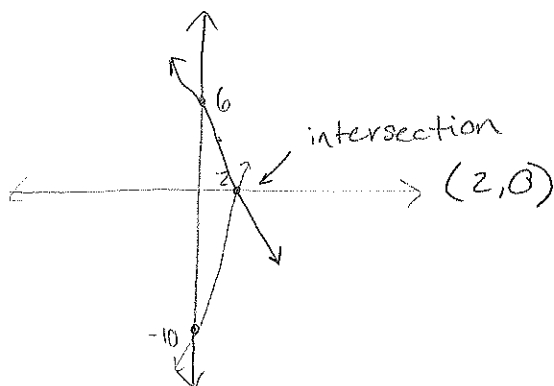
$$6 = 3 + b$$

$$3 = b$$

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

$$y = 3x + 3$$

- 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:

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).

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

Handwritten work for the division:

$$\begin{array}{r} 63 \overline{) 766} \\ \underline{726} \phantom{0} \\ 46 \phantom{0} \\ \underline{36} \phantom{0} \\ 100 \\ \underline{96} \\ 4 \end{array}$$

63

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

63  $\frac{5}{6}$ 

check:

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

$$\begin{array}{r} 199 \\ 2 \overline{) 388} \\ \underline{24} \phantom{0} \\ 148 \\ \underline{148} \\ 0 \end{array}$$

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

=

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

$$\begin{array}{r} 66 \\ 3 \overline{) 199} \\ \underline{18} \phantom{0} \\ 19 \end{array}$$

- 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

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

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

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

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

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

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

Check:

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

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

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

- 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  $(1, 6)$ .

~~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.

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

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

$$8x - 10 = 6$$

$$+10 \quad +10$$

$$8x = 16$$

$$8$$

$$x = 2$$

$$(2, 0)$$

$$(x, y) =$$

$$(2, 0)$$

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

$$y = 0$$

$$y = -3x + 6$$

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

$$0 = -6 + 6$$

$$0 = 0 \quad \checkmark$$

## Quiz 3

Name:

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).

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

$$\begin{array}{r} 063 \\ 12 \overline{) 766} \\ \underline{- 72} \phantom{0} \\ 46 \\ \underline{- 36} \phantom{0} \\ 10 \\ \underline{- 12} \\ \phantom{0} \end{array}$$

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

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

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

$$\begin{array}{r} \phantom{0} 12 \\ \times \phantom{0} 63 \\ \hline \phantom{0} 36 \\ 720 \\ \hline 756 \\ + \phantom{0} 10 \\ \hline 766 \quad \checkmark \end{array}$$

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

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

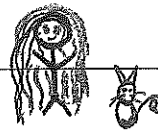
$$kt^2 + 3p^2 - 2pkt + 7$$

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

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

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



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

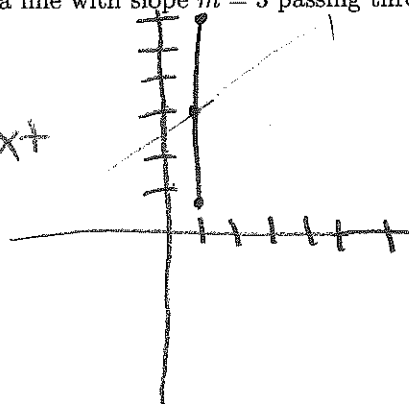
- 3) Find the equation of a line with slope  $m = 3$  and  $y$ -intercept  $b = -5$ .

$$y = 3x - 5$$

$$y = 3x - 5$$

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

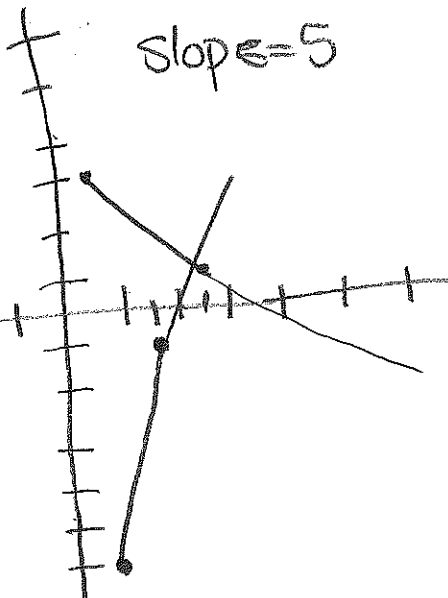
$$y = 3x +$$



$(1, 3)$

$$y = 3x + 1$$

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



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

## 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).

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

Handwritten work for problem 1:

Long division:  $12 \overline{) 766.0}$

63  $\times$  12 = 756

63  $\times$  6 = 378

63  $\times$  10 = 630

63  $\times$  12 = 756

63  $\times$  13 = 819

63  $\times$  14 = 882

63  $\times$  15 = 945

63  $\times$  16 = 1008

63  $\times$  17 = 1071

63  $\times$  18 = 1134

63  $\times$  19 = 1197

63  $\times$  20 = 1260

63  $\times$  21 = 1323

63  $\times$  22 = 1386

63  $\times$  23 = 1449

63  $\times$  24 = 1512

63  $\times$  25 = 1575

63  $\times$  26 = 1638

63  $\times$  27 = 1701

63  $\times$  28 = 1764

63  $\times$  29 = 1827

63  $\times$  30 = 1890

63  $\times$  31 = 1953

63  $\times$  32 = 2016

63  $\times$  33 = 2079

63  $\times$  34 = 2142

63  $\times$  35 = 2205

63  $\times$  36 = 2268

63  $\times$  37 = 2331

63  $\times$  38 = 2394

63  $\times$  39 = 2457

63  $\times$  40 = 2520

63  $\times$  41 = 2583

63  $\times$  42 = 2646

63  $\times$  43 = 2709

63  $\times$  44 = 2772

63  $\times$  45 = 2835

63  $\times$  46 = 2898

63  $\times$  47 = 2961

63  $\times$  48 = 3024

63  $\times$  49 = 3087

63  $\times$  50 = 3150

63  $\times$  51 = 3213

63  $\times$  52 = 3276

63  $\times$  53 = 3339

63  $\times$  54 = 3402

63  $\times$  55 = 3465

63  $\times$  56 = 3528

63  $\times$  57 = 3591

63  $\times$  58 = 3654

63  $\times$  59 = 3717

63  $\times$  60 = 3780

63  $\times$  61 = 3843

63  $\times$  62 = 3906

63  $\times$  63 = 3969

63  $\times$  64 = 4032

63  $\times$  65 = 4095

63  $\times$  66 = 4158

63  $\times$  67 = 4221

63  $\times$  68 = 4284

63  $\times$  69 = 4347

63  $\times$  70 = 4410

63  $\times$  71 = 4473

63  $\times$  72 = 4536

63  $\times$  73 = 4599

63  $\times$  74 = 4662

63  $\times$  75 = 4725

63  $\times$  76 = 4788

63  $\times$  77 = 4851

63  $\times$  78 = 4914

63  $\times$  79 = 4977

63  $\times$  80 = 5040

63  $\times$  81 = 5103

63  $\times$  82 = 5166

63  $\times$  83 = 5229

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63  $\times$  96 = 6048

63  $\times$  97 = 6111

63  $\times$  98 = 6174

63  $\times$  99 = 6237

63  $\times$  100 = 6300

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63  $\times$  102 = 6426

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63  $\times$  104 = 6552

63  $\times$  105 = 6615

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63  $\times$  108 = 6804

63  $\times$  109 = 6867

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63  $\times$  123 = 7749

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63  $\times$  126 = 7938

63  $\times$  127 = 8001

63  $\times$  128 = 8064

63  $\times$  129 = 8127

63  $\times$  130 = 8190

63  $\times$  131 = 8253

63  $\times$  132 = 8316

63  $\times$  133 = 8379

63  $\times$  134 = 8442

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63  $\times$  136 = 8568

63  $\times$  137 = 8631

63  $\times$  138 = 8694

63  $\times$  139 = 8757

63  $\times$  140 = 8820

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63  $\times$  169 = 10647

63  $\times$  170 = 10710

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63  $\times$  447 = 28161

63  $\times$  448 = 28224

63  $\times$  449 = 28287

63  $\times$  450 = 28350

63  $\times$  451 = 28413

63  $\times$  452 = 28476

63  $\times$  453 = 28539

63  $\times$  454 = 28602

63  $\times$  455 = 28665

63  $\times$  456 = 28728

63  $\times$  457 = 28791

63  $\times$  458 = 28854

63  $\times$  459 = 28917

63  $\times$  460 = 28980

63  $\times$  461 = 29043

63  $\times$  462 = 29106

63  $\times$  463 = 29169

63  $\times$  464 = 29232

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63  $\times$  471 = 29673

63  $\times$  472 = 29736

63  $\times$  473 = 29799

63  $\times$  474 = 29862

63  $\times$  475 = 29925

63  $\times$  476 = 29988

63  $\times$  477 = 30051

63  $\times$  478 = 30114

63  $\times$  479 = 3017

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

$$y = mx + b \quad \frac{y^2 - y^1}{x^2 - x^1} = m \quad (x^1, y^1) (x^2, y^2)$$

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

$$y = mx + b$$

+

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

$$-\frac{5}{3} + \frac{5}{3} = b$$

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

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

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

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

$$y = mx + b \quad \frac{y^2 - y^1}{x^2 - x^1} = m \quad (x^1, y^1) (x^2, y^2)$$

$$y = 3x + 3$$

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

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

$$y = 3x + 3$$

$$6 = 3 + b$$

$$b = 3$$

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

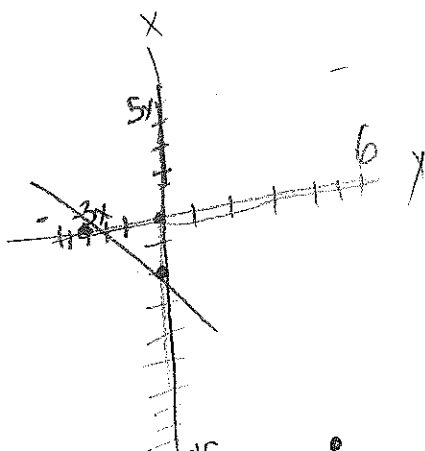
$$y = 5x - 10$$

$$y = -3x + 6$$

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

$(x, y) =$

$$(2, 2)$$



$$y = 5x - 10$$

$$y = -3x + 6$$

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

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

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

## Quiz 3

Name:

Erick Castillo

Perm Number:

5900887

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

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

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

$$\begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-720} \\ 46 \\ \underline{-36} \\ 10 \end{array} \quad \begin{array}{r} 12 \quad 72 \\ 24 \\ 36 \\ 48 \\ 60 \end{array} \quad \begin{array}{r} 63 \\ 12 \overline{) 766} \\ \underline{-126} \\ 630 \\ \underline{-756} \\ 110 \\ \underline{-766} \end{array}$$

- 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

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

$$\frac{2}{kt+p} - 2p(kt+p)$$

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

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

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

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

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

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

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

## 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  $b = -5$ .

$$y = mx + b$$

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

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

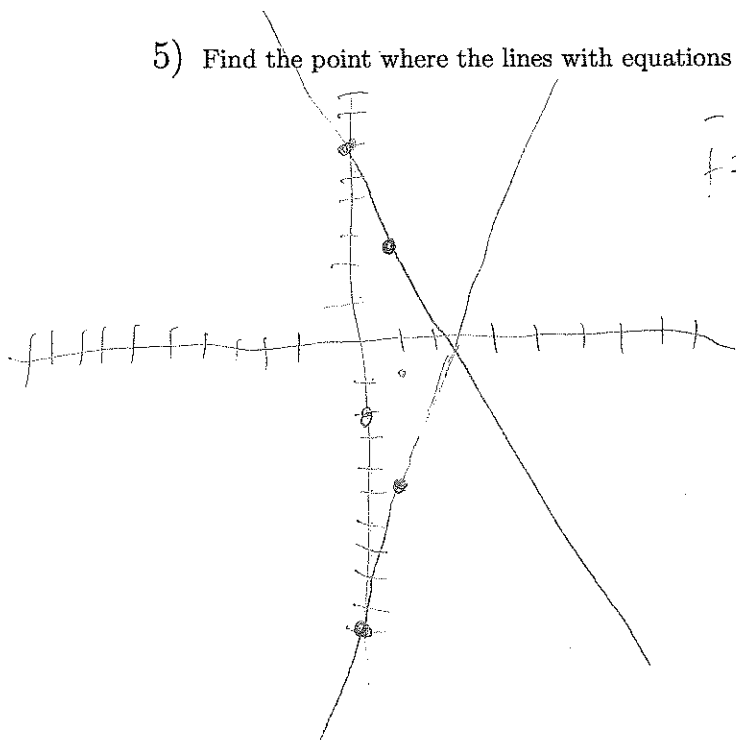
$$y - 6 = 3(x - 1)$$

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

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

$$y = 3x + 3$$

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



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

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

$$(x, y) =$$

$$\boxed{(2, 0)}$$

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

$$\begin{array}{l} y = -3(2) + 6 \\ = 0 \end{array}$$

## 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 →

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

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

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

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

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

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



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

$$m=3-5$$

$$3x-5$$

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

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

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

$$3x+3$$

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

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

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

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

$$y = -6 + 6$$

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

$$5x = 16 - 3x$$

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

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

## 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).

$$\frac{1}{12} \frac{6}{72}$$

$$\begin{array}{r} 62 \\ 12 \overline{) 766} \\ \underline{-72} \phantom{0} \\ 26 \\ \underline{-24} \\ 2 \end{array}$$

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

$$62 \frac{1}{6}$$

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

$$62 \frac{1}{6}$$

- 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

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

PEMDAS

$$x = kt + p$$

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

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

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

$$\begin{array}{cc} kt & p \\ k & p \\ \hline k^2t & kp \\ p & kt \\ \hline p^2 & \end{array}$$

$$2pkt + k^2t^2$$

$$2pkt + p^2$$

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

$$\begin{array}{r} kt \\ xkt \\ kt^2 \\ \hline k^2kt \\ k^2akt^2 \end{array}$$

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

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

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

$$4k^2t^2 + 2pkt + p^2$$

- 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  $(1, 6)$ .

$$y = 3x + b$$

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

$$6 = 3 + b$$

$$3 = b$$

$$y = 3x + 3$$

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

✓

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

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

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

$$8x = 16$$

$$x = 2$$

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

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

$$y = 10 - 10$$

$$y = 0$$

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

$$y = -6 + 6$$

$$y = 0$$

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

$$0 = 10 - 10 \checkmark$$

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

## Quiz 3

Name:

Annalise Evans

Perm Number:

5301023

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

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

$$\frac{383}{6}$$

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

$$\begin{array}{r} 63.8333 \\ 12 \overline{) 766.00} \\ \underline{-72} \phantom{00} \\ 46 \phantom{00} \\ \underline{-36} \phantom{00} \\ 100 \phantom{00} \\ \underline{-96} \phantom{00} \\ 40 \phantom{00} \\ \underline{-36} \phantom{00} \\ 4 \end{array}$$

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

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

$$\begin{array}{r} 19 \\ 4 \overline{) 766} \\ \underline{-4} \phantom{00} \\ 36 \phantom{00} \\ \underline{-36} \phantom{00} \\ 0 \end{array}$$

$$\begin{array}{r} 12 \\ 6 \overline{) 766} \\ \underline{-6} \phantom{00} \\ 16 \phantom{00} \\ \underline{-12} \phantom{00} \\ 40 \end{array}$$

$$\begin{array}{r} 383 \\ 2 \overline{) 766} \\ \underline{-6} \phantom{00} \\ 16 \phantom{00} \\ \underline{-16} \phantom{00} \\ 0 \end{array}$$

$$\begin{array}{r} 12 \\ 3 \overline{) 383} \\ \underline{-3} \phantom{00} \\ 08 \phantom{00} \\ \underline{-6} \phantom{00} \\ 2 \end{array}$$

$$\begin{array}{r} 63 \\ 6 \overline{) 383} \\ \underline{-36} \phantom{00} \\ 23 \phantom{00} \\ \underline{-18} \phantom{00} \\ 5 \end{array}$$

$$\begin{array}{r} 163 \\ \times 6 \\ \hline 378 \\ + 960 \\ \hline 383 \end{array}$$

$$\frac{383}{6}$$

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 →

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

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

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

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

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

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

$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

$$3x - 5$$

- 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.

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

$$8x = 16$$

$$x = 2$$

 $(x, y) =$ 

$$(2, 0)$$

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

$$y = 0$$

## 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).

$$\begin{array}{r} 12 \\ \times 53 \\ \hline 36 \\ + 60 \\ \hline 636 \end{array}$$

$$\begin{array}{r} 12 \\ \times 60 \\ \hline 720 \end{array}$$

$$\begin{array}{r} 12 \\ \times 62 \\ \hline 24 \\ + 72 \\ \hline 744 \\ + 12 \\ \hline 756 \end{array}$$

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

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

$$\begin{array}{r} 63 \\ \times 12 \\ \hline 126 \\ + 63 \\ \hline 656 \end{array}$$

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

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

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

Simplify the result as much as possible.

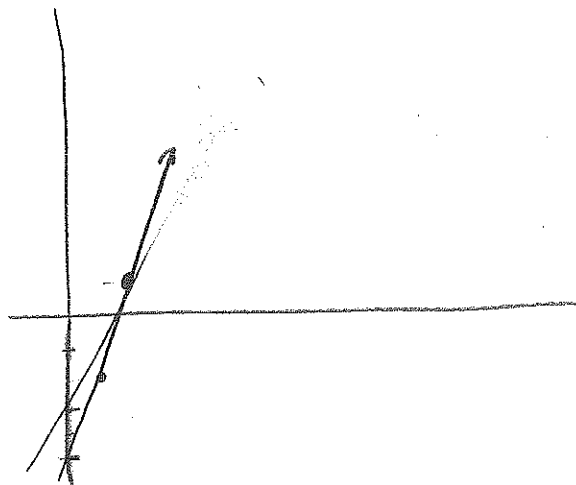
When you're done, write the result of this simplification here

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

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

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

$$y = 3x - 5$$



$$y = 3x - 5$$

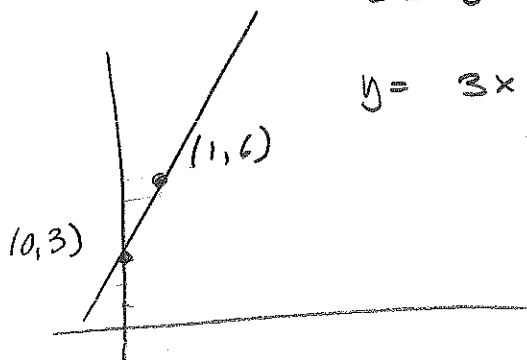
- 4) Find the equation of a line with slope  $m = 3$  passing through the point  $(1, 6)$ .

$$y = 3x + b$$

$$6 = 3 + b$$

$$b = 3$$

$$y = 3x + 3$$



$$y = 3x + 3$$

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

$$8x - 10 = 6$$

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

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

$$x = 2$$

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

$$8x - 10 = 6$$

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

$$x = 2$$

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

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

$$y = 0 \quad \checkmark$$

check

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

$$y = -6 + 6$$

$$y = 0 \quad \checkmark$$

## Quiz 3

Name:

Octavia Hoffman

Perm Number:

6625370

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

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

$$\begin{array}{rcl} 10 & = & 120 \downarrow +120 \\ 20 & = & 240 \downarrow +120 \\ 30 & = & 360 \downarrow +120 \\ 40 & = & 480 \downarrow +120 \\ 50 & = & 600 \downarrow +120 \\ 60 & = & 720 \downarrow +12 \\ 61 & = & 732 \downarrow +12 \\ 62 & = & 744 \downarrow +12 \\ 63 & = & 756 \downarrow \end{array}$$

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

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

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

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

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

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

- 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

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

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

$$x = kt + p$$

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

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

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

distribute the minus

$$\begin{array}{l} Kt^2 + \cancel{2kt} + p^2 - \cancel{2kt} - 2p^2 + 7 \\ Kt^2 + 7 - p^2 \end{array}$$



- 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  $(1, 6)$ .

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

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

$$+6 \quad +6$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

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

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

$$+3x + 10 \quad +3x + 10$$

 $(x, y) =$ 

$$(2, 0)$$

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

$$x = 2$$

Both cross @  $(2, 0)$

## 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).

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

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

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 →

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

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

$$(k + p)(k + p)$$

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

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

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

- 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  $(1, 6)$ .

$$y = 3x + b$$

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

$$6 = 3 + b$$

$$3 = b$$

$$y = 3x + 3$$

$$y = 3x + 3$$

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

$$y = 5x - 10$$

$$y = -3x + 6$$

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

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

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

$$8x - 10 = 6$$

$$+10 \quad +10$$

$$8x = 16$$

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

$$x = 2$$

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

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

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

## 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  $b = -5$ .

$$\begin{aligned}y &= mx + b \\y &= 3x + (-5) \\y &= 3x - 5\end{aligned}$$

$$y = 3x - 5$$

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

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

$$y = 3x + 3$$

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

$$(x, y) =$$

## 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).

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

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

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

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

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

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

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

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

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

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

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

$$\begin{aligned} &(kt + p)(kt + p) \\ &kt^2 + kt + p + kt + p^2 \\ &kt^2 + 2kt + p + p^2 \end{aligned}$$

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

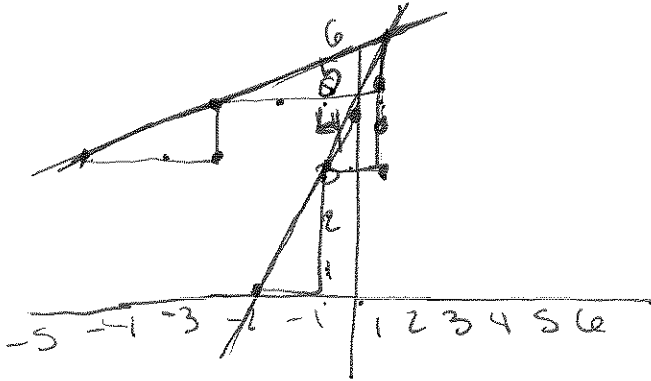
$$y = mx + b$$

$$y = 3x - 5$$

 $y =$ 

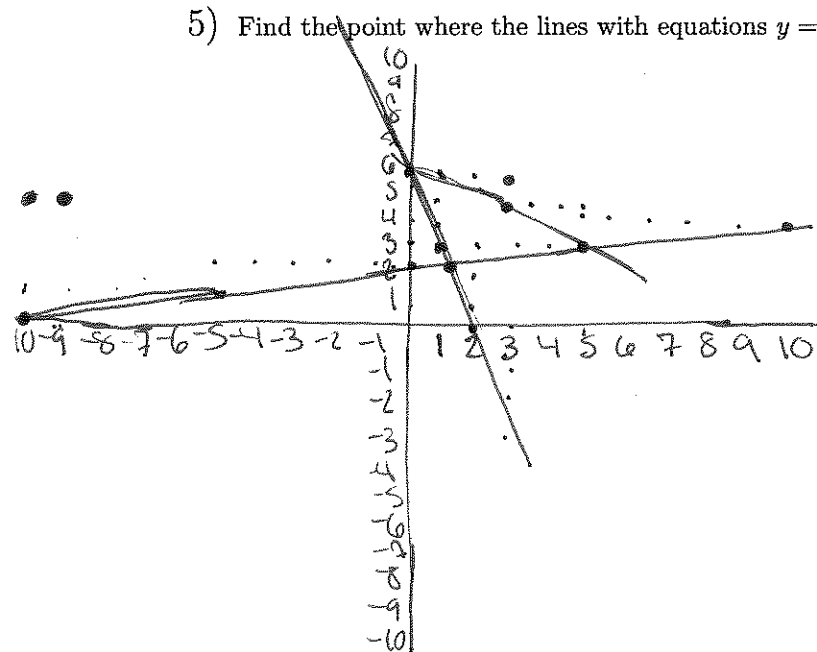
$$3x - 5$$

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


 $y =$ 

$$\cancel{3x + 4} \text{ or } 3x + 5?$$

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


 $(x, y) =$ 

$$\cancel{(5, 4)} (5, 4)$$

## Quiz 3

Name:

Nat Alvarez

Perm Number:

5022337

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

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

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

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

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array} \quad \begin{array}{r} 12 \\ \times 9 \\ \hline 36 \end{array}$$

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

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

???

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



- 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.

$$y = 5x - 10$$

$$y = -3x + 6$$

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

$$\begin{array}{r} 5x - 10 = -3x + 6 \\ +3x \quad \quad +10 \end{array}$$

$$\begin{array}{r} 8x = 16 \\ \hline 8 \quad 8 \\ x = 2 \end{array}$$

$$\begin{array}{r} y = 5(2) - 10 \\ 10 - 10 \\ y = 0 \end{array}$$

$$\begin{array}{r} y = -3(2) \\ -6 + 6 \end{array}$$

## Quiz 3

Name:

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 →

$$kt^2 - p^2 + 7$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$(kt+p)(kt+p) - 2pkt - 2p^2 + 7$$

$$kt^2 + \cancel{pkt} + \cancel{pkt} + p^2 - 2\cancel{pkt} - 2p^2 + 7$$

$$kt^2 + 2\cancel{pkt}$$

$$kt^2 - p^2 + 7$$

- 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  $(1, 6)$ .

$$y = 3x + b \quad \begin{matrix} (1, 6) \\ x \ y \end{matrix}$$

$$6 = 3(1) + b$$

$$6 = 3 + b$$

$$-3$$

$$3 = b$$

$$y = 3x + 3$$

 $y =$ 

$$3x + 3$$

- 5) Find the point where the lines with equations  $y = 5x - 10$  and  $y = -3x + 6$  cross.

$$y = 5x - 10 \quad -3\left(\frac{x+10}{5}\right) + 6 = y$$

$$y = -3x + 6$$

$$y = 5x - 10 \quad \frac{-3x - 30}{5} + 6$$

 $(x, y) =$ 

$$-3x$$

$$x = 5y - 10$$

$$-3x - 6 + 6$$

 $N$ 

$$-3x = y$$

$$\frac{x+10}{5} = \frac{5y}{5}$$

$$y = 5x - 10$$

$$\frac{y+10}{5} = x$$

## 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

$$kt^2 + 2ktp - p^2 - 2pk + 2pt + 7$$

$$x^2 - 2px + 7$$

$$(kt+p)^2 - 2p(kt+p) + 7$$

$$kt^2 + 2ktp + p^2 - 2pk + 2pt + 2p^2 + 7$$

$$kt^2 + 2ktp + 3p^2 + 2pk + 2pt + 7$$

$$kt^2 + 2ktp + p^2 - 2pk + 2pt + 2p^2 + 7$$

$$kt^2 + 2ktp - p^2 - 2pk + 2pt + 7$$

$$(kt+p)(kt+p)$$

$$kt^2 + ktp + pkt + p^2$$

$$kt^2 + ktp + ktp + p^2$$

$$kt^2 + 2ktp + p^2$$