

Name:

Class:

Scavenger Hunt

Create linear equations using the points and put into slope-intercept form

Yellow 1

$(-3, 2)$

$(-7, -6)$

$$\frac{-6-2}{-7+3} = \frac{-8}{-4} = 2$$

$$y = 2x + b$$

$$2 = -6 + b$$

$$b = 8$$

$$y = 2x + 8$$

Yellow 2

$(7, 2)$   $(-3, 0)$

$$\frac{2-0}{7+3} = \frac{2}{10} = \frac{1}{5}$$

$$y = \frac{1}{5}x + b$$

$$0 = \frac{1}{5} \cdot -3 + b$$

$$y = \frac{1}{5}x + \frac{3}{5}$$

Blue 1

$(6, -7)$   $(6, 8)$

$$\frac{8+7}{6-6} = \frac{15}{0}$$

$$x = 6$$

Blue 2

$(2, -2)$   $(-3, 1)$

$$\frac{1+2}{-3-2} = \frac{3}{-5}$$

$$y = -\frac{3}{5}x + b$$

$$1 = -\frac{3}{5} \cdot -3 + b$$

$$1 = \frac{9}{5} + b$$

$$b = -\frac{4}{5}$$

$$y = -\frac{3}{5}x - \frac{4}{5}$$

Red 1

$(0, 3)$   $(2, -3)$

$$\frac{0+3}{0-2} = \frac{3}{-2}$$

$$y = -\frac{3}{2}x + b$$

$$0 = b$$

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

Red 2

$(0, 5)$   $(7, -5)$

$$\frac{5+5}{0-7} = -\frac{10}{7}$$

$$y = -\frac{10}{7}x + b$$

$$5 = b$$

$$y = -\frac{10}{7}x + 5$$

Green 1

$(7, 5)$   $(1, -8)$

$$\frac{5+8}{7-1} = \frac{13}{6}$$

$$y = \frac{13}{6}x + b$$

$$-8 = \frac{13}{6} + b$$

$$b = -\frac{48}{6}$$

$$y = \frac{13}{6}x - \frac{48}{6}$$

Green 2

$(1, 7)$   $(2, 6)$

$$\frac{7-6}{1-2} = -\frac{1}{1} = -1$$

$$y = -x + b$$

$$7 = -1 + b$$

$$b = 8$$

$$y = -x + 8$$