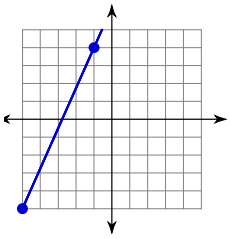
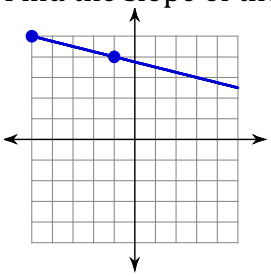
Honors Algebra 2 Name: _____
Circuit: Review of Linear Functions Date: _____

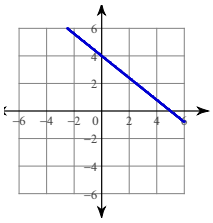
Start in cell #1. Answer the question. Find the answer and that will become #2. Continue in this manner until the circuit is done. No calculators. All work must be shown to get full credit for the circuit.
Slope-intercept form: $y = mx + b$ Standard form: $Ax + By = C$ Point-Slope form: $y - y_1 = m(x - x_1)$

#1. _____ Answer _____ Find the slope of the line. 	# _____ Answer: $y = \frac{3}{2}x - 3$ Write the equation in slope-intercept form $2x + 3y = -7$
# _____ Answer: $-\frac{1}{4}$ Find the slope of the line: $y = -\frac{9}{4}x + 2$	# _____ Answer: $\frac{2}{5}$ Find the slope of the line perpendicular to $y = -\frac{3}{2}x - 2$
# _____ Answer: $\frac{2}{3}$ Write the slope-intercept form of the line that passes through: $(4, 3)$, slope $= \frac{3}{2}$	# _____. Answer: $\frac{9}{4}$ Find the slope of the line. 
# _____ Answer: $8x - 3y = 7$ Find the slope of the line parallel to $y = \frac{2}{5}x - 2$	# _____ Answer: $-\frac{9}{4}$ Find the slope of the line: $y = \frac{1}{4}x + 4$

#_____ Answer: $\frac{1}{4}$

Find the slope of the line:
$(17, -6), (-11, 7)$

_____ Answer:

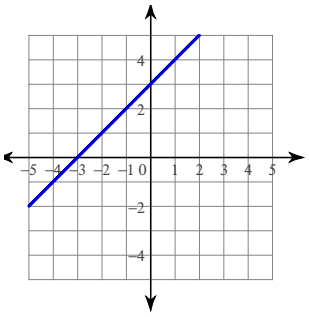


Write the equation of the line in slope-intercept form given:

Slope = 7, y-intercept = 5

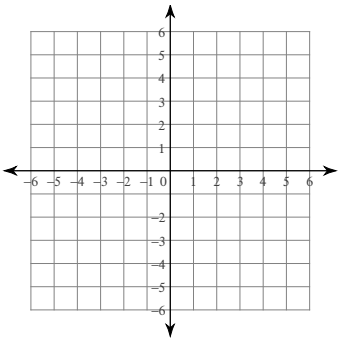
_____ Answer $y = 7x + 5$

Write the slope-intercept form of the equation of the line.



_____ Answer: $x = 1$

Sketch the graph of
$3x + 4y = -12$

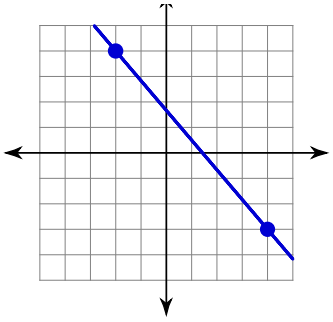


_____ Answer: $-\frac{13}{28}$

Find the slope of the line:
$(11, -18), (-1, -7)$

_____ Answer: $y = 1$

Write the equation of the line.



_____ Answer: $y = x - 1$

Write the standard form of the equation that passes through: $(3, -4)$, and is perpendicular to $y = -7x$

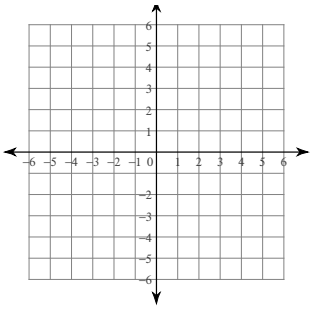
_____Answer: $x - 7y = 31$

Write the standard form of the equation that passes through $(2, 3)$ and is parallel to $y = \frac{8}{3}x - 4$

_____ Answer: $-\frac{11}{12}$

Sketch the graph of the line:

$$y = \frac{5}{4}x - 2$$



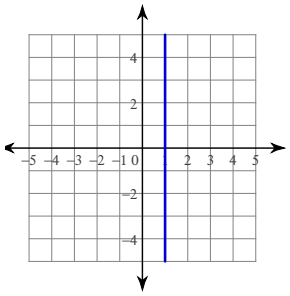
_____ Answer: $y = x + 3$

Write the slope-intercept form of the equation

Slope $= -\frac{5}{4}$, y-intercept $= 5$

_____ Answer: $y = -\frac{7}{6}x + \frac{5}{3}$

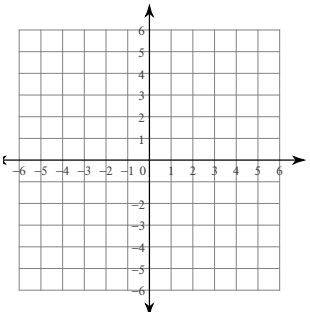
Write the equation of the line:



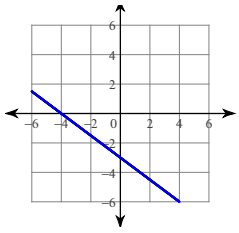
_____ Answer: $-\frac{2}{3}$

x-intercept = 5, y-intercept = 4

Sketch the graph of the line with the given x-intercept and y-intercept.



_____ Answer:



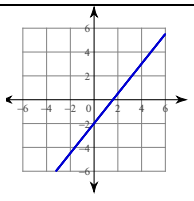
Write the equation in slope-intercept form.

$x - 6y = -30$

_____ Answer: $-\frac{4}{3}$

Write the slope-intercept form of the equation of the line passing through: (2, 1), (4, 3).

_____ Answer:

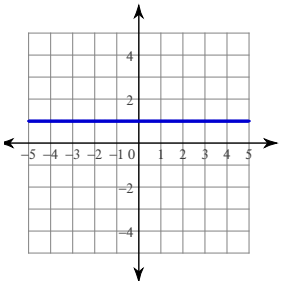


Find the slope of the line:

$2x + 3y = 15$

_____ Answer: $y = -\frac{5}{4}x + 5$

Write the equation of the line.



# _____ Answer: $y=\frac{1}{6}x+5$ Write the slope-intercept form of equation of the line that passes through: $(5,5),(-1,-1)$.	# _____ Answer: $x-5y=20$ Write the equation in standard form. $y=-\frac{2}{3}x-2$
# _____ Answer: $y=-\frac{3}{5}x-\frac{2}{5}$ Write the standard form of the equation of the line passing through: $(4,3)$, slope $=\frac{3}{2}$	#_____ Answer: $y=x$ Write the standard form of the equation of the line described. Slope = –4, y-intercept = 3
# _____ Answer: $4x+y=3$ Write the standard form of the equation of the line described. Slope $=-\frac{9}{2}$, y-intercept = 4	# _____ Answer: $2x+3y=-6$ Write the slope-intercept form of the line passing through: $(1,-1)$, slope $=-\frac{3}{5}$
# _____ Answer: $9x+2y=8$ Write the standard form of the equation of the line described. Slope $=\frac{1}{5}$, y-intercept = –4	# _____ Answer: $3x-2y=6$ Find the slope of the line $4x+3y=-9$