

Name: _____

Date: KEY

Pre-Calculus 11 – Linear Review Worksheet

1) Which ordered pairs satisfy the equation $y = -\frac{2}{3}x + 5$?

a) (3, 3)
 $3 = -\frac{2}{3}(3) + 5$
 $3 = -2 + 5$
 $3 = 3$
Yes

b) (5, 0)
 $0 = -\frac{2}{3}(5) + 5$
 $0 = -\frac{10}{3} + \frac{5 \times 3}{1 \times 3}$
 $0 = -\frac{10}{3} + \frac{15}{3}$
 $0 = \frac{5}{3} \times$ NO.

c) $(2, \frac{11}{3})$
 $\frac{11}{3} = -\frac{2}{3}(2) + \frac{5 \times 3}{1 \times 3}$
 $\frac{11}{3} = -\frac{4}{3} + \frac{15}{3}$
 $\frac{11}{3} = \frac{11}{3}$ Yes

2) For each linear equation: (a) write in $y = mx + b$ form (b) graph the line

a) $2y - x - 10 = 0$

$\frac{2y}{2} = \frac{1x}{2} + \frac{10}{2}$
 $y = \frac{1}{2}x + 5$
 $m = \frac{1}{2}$ (up 1, right 2)
 (0, 5)

b) $3x = 6 - 3y$

$3x - 6 = -3y$
 $\frac{-3y}{-3} = \frac{3x - 6}{-3}$
 $y = -x + 2$
 $m = -1$ (down 1, right 1)
 (0, 2)



