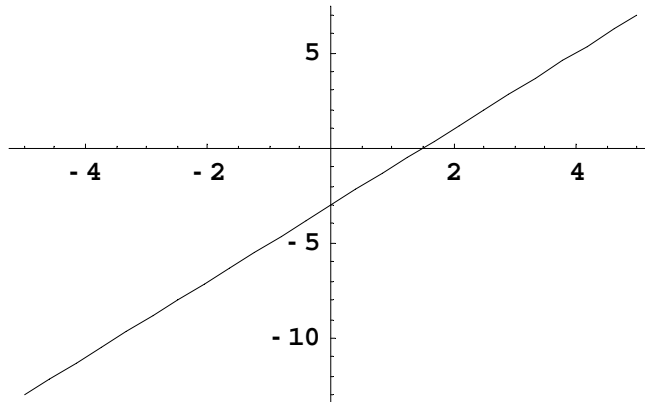
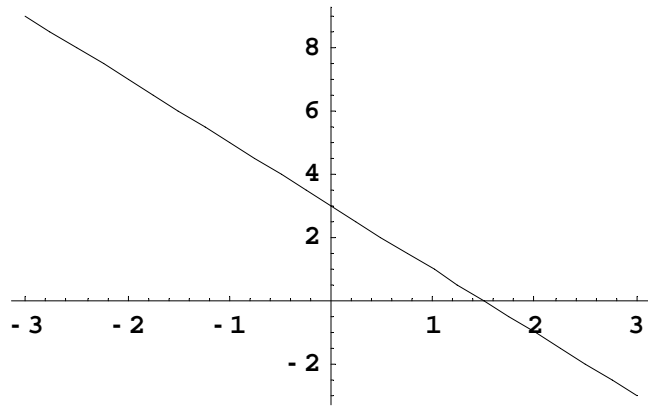


## Math 1021 Review for Test 2 – Answer Key

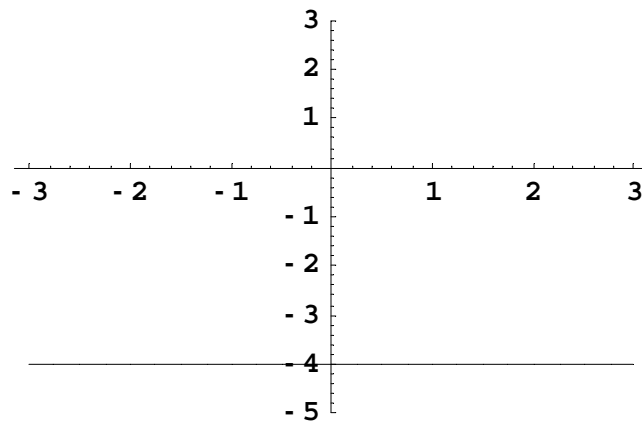
- 1)  $x = 22/3$       2)  $x = 1/3$       3)  $x = -1$   
4) All real numbers except  $x = -2, x = -1$ .
- 5)  $x = 9$  (check necessary)    6)  $x = 1/4$  (check necessary)      7)  $x = -11/4, x = 5/4$
- 8)  $\left[-\frac{5}{4}, \infty\right)$       9)  $[-2, 3)$       10)  $\left(-\infty, -\frac{3}{2}\right) \cup (1, \infty)$
- 11)  $\left(-\frac{7}{3}, -\frac{1}{3}\right)$       12)  $\left(-\infty, \frac{2}{5}\right] \cup \left[\frac{6}{5}, \infty\right)$
- 13) Joe rows at 12.5 mph, and the current is 2.5 mph.    14) 55%    15)  $\frac{6}{5}$  hr = 1 hr 12 min.
- 16) a.  $y = 3x - 9$       b.  $y + 3 = 3(x - 2)$
- 17)  $y = -6x - 28$       18)  $\left(-\frac{9}{2}, -1\right)$       19)  $\sqrt{37}$       20)  $x = -9$
- 21) yes      22)  $x =$  a constant,  $y =$  a constant      23)  $y = -x + 3$
- 24)  $y = 2x - 3$



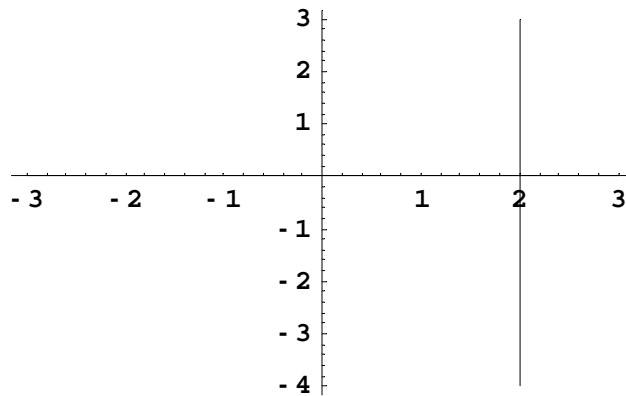
$$y = -2x + 3$$



$$y = -4$$



$$x = 2$$



25) parallel

$$26) y = \frac{2}{5}x + \frac{9}{5}$$

$$27) y = -\frac{5}{2}x - 4$$

$$28) (a) x = -\frac{4}{7}, y = -\frac{19}{7}$$

$$(b) x = 2, y = 3$$

(c)  $\emptyset$