

Math 1021 Review for Test 2 – Answer Key

1) Joe rows at 12.5 mph, and the current is 2.5 mph.

2) 55% 3) $\frac{6}{5}$ hr = 1 hr 12 min.

4) 24

5) a. $y = 3x - 9$ b. $y + 3 = 3(x - 2)$

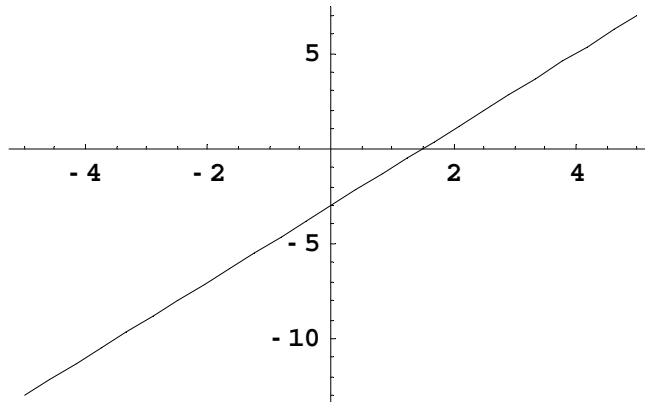
6) $y = -6x - 28$ 7) $\left(-\frac{9}{2}, -1\right)$ 8) $\sqrt{37}$ 9) $x = -9$

10) yes

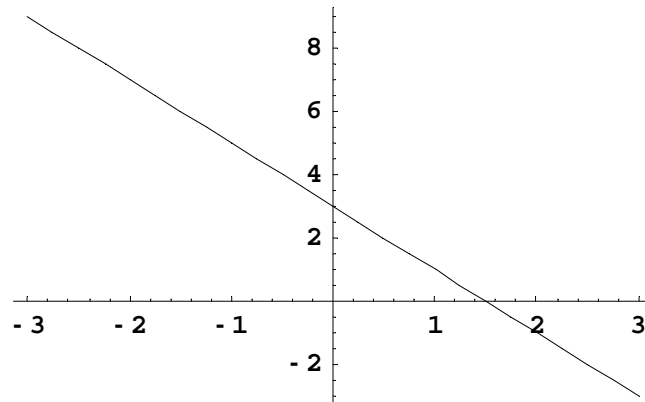
11) $x =$ a constant, $y =$ a constant

12) $y = -x + 3$

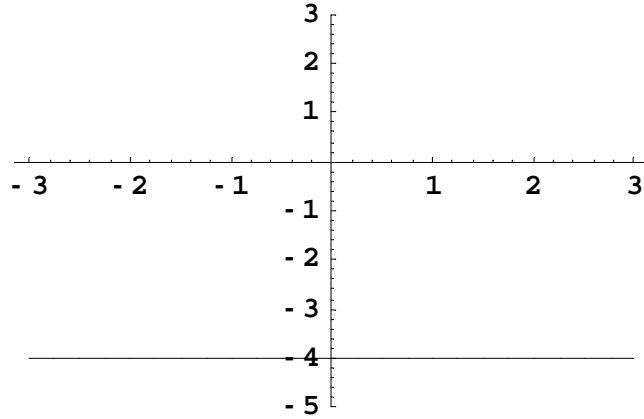
13) $y = 2x - 3$



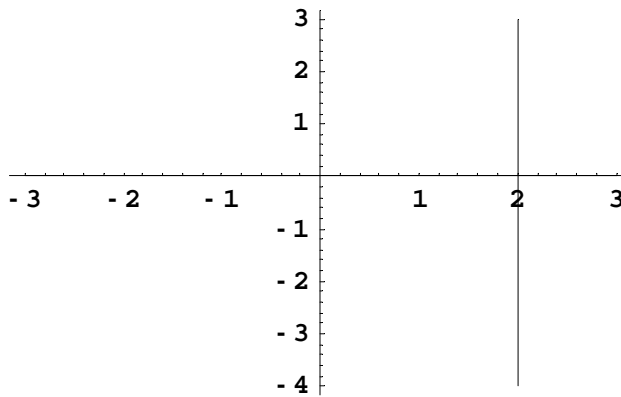
$y = -2x + 3$



$y = -4$



$$x = 2$$



14) parallel

$$15) y = \frac{2}{5}x + \frac{9}{5}$$

$$16) y = -\frac{5}{2}x - 4$$

$$17) (a) x = -\frac{4}{7}, y = -\frac{19}{7}$$

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

(c) \emptyset

$$(d) x = 2, y = 2, z = 1$$

$$18) x = 3/2, 4$$

$$19) x = 0, 2$$

$$20) x = \pm \frac{3}{5}$$

$$21) x = \pm 2\sqrt{3}$$

$$22) x = 5 \pm 2\sqrt{7}$$

$$23) x = \frac{2 \pm \sqrt{2}}{2}$$

$$24) x = 3 \pm 2\sqrt{3}$$

$$25) x = \frac{3 \pm \sqrt{3}}{2}$$

$$26) 1 + 5i$$

$$27) 12 - 5i$$

$$28) \frac{5}{13} + \frac{12}{13}i$$

$$29) x = 2 \pm i$$

$$30) x = \frac{-2 \pm i\sqrt{6}}{2}$$