Activity 1.6.1: Describing Graphs of Linear Equations Using the Activity 1.6.1: Describing Graphs of Linear Equations Using the Slope and Intercepts Slope and Intercepts Total points = 65 Total points = 65 A. Answers A. Answers 2. -5y - 10 = 0 $\frac{1}{5}$ 1. y = -3x - 5 $\frac{1}{5}$ 1. y = -3x - 52. -5y - 10 = 0 \checkmark m=-3 \checkmark , Falling \checkmark -5(0) - 10 = 0m=-3 \checkmark , Falling \checkmark -5(0) - 10 = 0 $\frac{1}{6}$ 2. 6x + 3y = 9-10 = 0 \checkmark -10 = 0 \checkmark $\therefore a = undefined \checkmark$ 52.6x + 3y = 9 $\therefore a = undefined \checkmark$ -5y - 10 + 10 = 10 \checkmark 6x - 6x + 3y = -6x + 96x - 6x + 3y = -6x + 9-5y - 10 + 10 = 10 \checkmark $\frac{3y}{3} = \frac{-6x}{3} + \frac{9}{3}$ y = -2x + 3 $\frac{-5y}{-5} = \frac{10}{-5}$ $y = -2 \checkmark$ $3\frac{y}{3} = \frac{-6x}{3} + \frac{9}{3}$ y = -2x + 3 $\frac{-5y}{-5} = \frac{10}{-5}$ $y = -2 \checkmark$ m=-2 \checkmark , Falling \checkmark b = -2m=-2 \checkmark , Falling \checkmark b = -2trend: Horizontal 🗸 trend: Horizontal 🗸 3. -4y - 8 = 03. -4y - 8 = 03. x = 73. x = 7 $-4y - 8 + 8 = 0 + 8 \checkmark$ $-4y = \frac{8}{4} \checkmark$ $-4y - 8 + 8 = 0 + 8 \checkmark$ $-4y - 4y = \frac{8}{-4} \checkmark$ $\therefore a = 7 \checkmark$ $\therefore a = 7 \checkmark$ $0 = 7 \checkmark$ $0 = 7 \checkmark$ $\frac{}{-4}$ $\therefore b = undefined \checkmark$ $\therefore b = undefined \checkmark$ $y = -2 \checkmark$ $y = -2 \checkmark$ trend: Vertical ✓ trend: Vertical 🗸 m=0 \checkmark , Horizontal \checkmark 4. 4y - 16 = 0 \checkmark m=0 \checkmark , Horizontal \checkmark 4. 4y - 16 = 04(0) - 16 = 0 \checkmark 4(0) - 16 = 04. $x = -3 \checkmark$ 4. $x = -3 \checkmark$ -16 = 0 \checkmark -16 = 0 \checkmark $m = undefined \checkmark$, Vertical \checkmark $m = undefined \checkmark$, Vertical \checkmark $\therefore a = undefined \checkmark$ $\therefore a = undefined \checkmark$ 4y - 16 = 04y - 16 = 0 \checkmark 5. y = 3x - 25. y = 3x - 24y - 16 + 16 = 0 + 16 \checkmark 4y - 16 + 16 = 0 + 16 \checkmark $\frac{4y}{4} = \frac{16}{4} \checkmark$ $\frac{4y}{4} = \frac{16}{4} \checkmark$ m=3 \checkmark , Rising \checkmark m=3 \checkmark , Rising \checkmark $y = 4 \checkmark$ y = 4B. Answers B. Answers b = 4 $\therefore b = 4 \checkmark$ 1. 6x + 3y = 121. 6x + 3y = 12 $6x + 3(0) = 12 \checkmark$ trend: Horizontal 🗸 $6x + 3(0) = 12 \checkmark$ trend: Horizontal 🗸 $\frac{6x}{6} = \frac{12}{6} \checkmark$ $\frac{6x}{6} = \frac{12}{6} \checkmark$ 5. y = 4x - 125. y = 4x - 120 = 4x - 120 = 4x - 12 $x = 2 \checkmark$ x=2 $\begin{array}{c} 0 - 4x = 4x - 4x - 12 \checkmark \\ \frac{-4x}{-4} = \frac{-12}{-4} \checkmark \end{array}$ $\begin{array}{c} 0 - 4x = 4x - 4x - 12 \checkmark \\ \frac{-4x}{-4} = \frac{-12}{-4} \checkmark \end{array}$ $\therefore a = 2 \checkmark$ $\therefore a = 2 \checkmark$ $6(0) + 3y = 12 \checkmark$ $\frac{3y}{3} = \frac{12}{3} \checkmark$ $y = 4 \checkmark$ $x = 3 \checkmark \overline{-4}$ $x = 3 \checkmark \overline{-4}$ 6(0) + 3y = 12 \checkmark $\frac{3y}{3} = \frac{12}{3} \checkmark$ $y = 4 \checkmark$ $\therefore a = 3 \checkmark$ $\therefore a = 3 \checkmark$ $y = 4(0) - 12 \checkmark$ $y = 4(0) - 12 \checkmark$ $\therefore b = 4 \checkmark$ $\therefore b = 4 \checkmark$ $y = -12 \checkmark$ $y = -12 \checkmark$ trend: Falling ✓ $b = -12 \checkmark$ trend: Falling ✓ $b = -12 \checkmark$ trend: Rising ✓ trend: Rising ✓ Activity 1.6.1: Describing Graphs of Linear Equations Using the Activity 1.6.1: Describing Graphs of Linear Equations Using the Slope and Intercepts Slope and Intercepts Total points = 65Total points = 65A. Answers A. Answers $\frac{1}{2}$ 1. y = -3x - 5 $\frac{1}{5}$ 1. y = -3x - 52. -5y - 10 = 02. -5y - 10 = 0-5(0) - 10 = 0 \checkmark m=-3 \checkmark , Falling \checkmark m=-3 \checkmark , Falling \checkmark -5(0) - 10 = 0-10 = 0 \checkmark -10 = 0 \checkmark $\therefore a = undefined \checkmark$ $\therefore a = undefined \checkmark$ $\frac{1}{5}$ 2. 6x + 3y = 96x - 6x + 3y = -6x + 9-5y - 10 + 10 = 10 \checkmark 6x - 6x + 3y = -6x + 9-5y - 10 + 10 = 10 \checkmark $\frac{3y}{3} = \frac{-6x}{3} + \frac{9}{3}$ y = -2x + 3 $\frac{3y}{3} = \frac{-6x}{3} + \frac{9}{3}$ y = -2x + 3 $\frac{-5y}{-5} = \frac{10}{-5} \checkmark$ $\frac{-5y}{-5} = \frac{10}{-5}$ $y = -2 \checkmark$ $y = -2 \checkmark$ m=-2 \checkmark , Falling \checkmark b = -2m=-2 \checkmark , Falling \checkmark b = -2

- 6x + 3y = 9 6x 6x + 3y = 9
- 3. -4y 8 = 0-4y - 8 + 8 = 0 + 8 $\frac{-4y}{-4} = \frac{8}{-4} \checkmark$ $y = -2 \checkmark$
- m=0 \checkmark , Horizontal \checkmark 4. $x = -3 \checkmark$
- $m = undefined \checkmark$, Vertical \checkmark
- 5. y = 3x 2m=3 \checkmark , Rising \checkmark
- B. Answers 1. 6x + 3y = 12 $6x + 3(0) = 12 \checkmark$ $\frac{6x}{6} = \frac{12}{6} \checkmark$ $x = 2 \checkmark$ $\therefore a = 2 \checkmark$ $6(0) + 3y = 12 \checkmark$ $\frac{3y}{3} = \frac{12}{3} \checkmark$ $y = 4 \checkmark$ $\therefore b = 4 \checkmark$ trend: Falling ✓

- trend: Horizontal 🗸
- $\therefore a = 7 \checkmark$ $0 = 7 \checkmark$ $\therefore b = undefined \checkmark$ trend: Vertical ✓ 4. 4y - 16 = 04(0) - 16 = 0

3. $x = 7 \checkmark$

- -16 = 0 \checkmark $\therefore a = undefined \checkmark$ 4y - 16 = 04y - 16 + 16 = 0 + 16 \checkmark $\frac{4y}{4} = \frac{16}{4} \checkmark$ $y = 4 \checkmark$ $\therefore b = 4 \checkmark$
- trend: Horizontal 🗸 5. $y = 4x - 12 \checkmark$ $0 = 4x - 12 \checkmark$ $\begin{array}{c} 0 - 4x = 4x - 4x - 12 \checkmark \\ \frac{-4x}{-4} = \frac{-12}{-4} \checkmark \end{array}$ $x = 3 \checkmark \boxed{-4}$ $\therefore a = 3 \checkmark$ $y = 4(0) - 12 \checkmark$ $y = -12 \checkmark$ $b = -12 \checkmark$ trend: Rising ✓

- 3. -4y 8 = 0 $-4y - 8 + 8 = 0 + 8 \checkmark$ $-4y - 4 = \frac{8}{-4} \checkmark$ $y = -2 \checkmark$ m=0 \checkmark , Horizontal \checkmark
- 4. $x = -3 \checkmark$ $m = undefined \checkmark$, Vertical \checkmark
- 5. y = 3x 2m=3 \checkmark , Rising \checkmark
- B. Answers 1. 6x + 3y = 126x + 3(0) = 12 \checkmark $\frac{6x}{6} = \frac{12}{6} \checkmark$ x = 2 $\therefore a = 2 \checkmark$ $6(0) + 3y = 12 \checkmark$ $\frac{3y}{3} = \frac{12}{3} \checkmark$ $y = 4 \checkmark$

 $\therefore b = 4 \checkmark$

trend: Falling ✓

- trend: Horizontal 🗸
- 3. x = 7 $\therefore a = 7 \checkmark$ $0 = 7 \checkmark$ $\therefore b = undefined \checkmark$ trend: Vertical 🗸 4. 4y - 16 = 0
 - 4(0) 16 = 0-16 = 0 \checkmark $\therefore a = undefined \checkmark$ 4y - 16 = 04y - 16 + 16 = 0 + 16 $\frac{4y}{4} = \frac{16}{4} \checkmark$ $\vec{y} = 4 \checkmark$ $\therefore b = 4 \checkmark$
- trend: Horizontal 🗸 5. $y = 4x - 12 \checkmark$ 0 = 4x - 12 $\begin{array}{c} 0 - 4x = 4x - 4x - 12 \checkmark \\ \frac{-4x}{-4} = \frac{-12}{-4} \checkmark \end{array}$ $x = 3 \checkmark \overline{-4}$ $\therefore a = 3 \checkmark$ $y = 4(0) - 12 \checkmark$ $y = -12 \checkmark$ $b = -12 \checkmark$

trend: Rising ✓