Lesson 2.4.3: Graphing Linear Functions Total points = 48

1. Let
$$x = 0$$
: \checkmark Let $x = 1$: \checkmark

$$f(x) = 2x + 1 \checkmark \qquad f(x) = 2x + 1 \checkmark$$

$$f(x) = 2x + 1$$
 $f(x) = 2x + 1$
 $f(0) = 2(0) + 1$ $f(1) = 2(1) + 1$

$$f(0) = 0 + 1 \checkmark$$

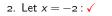
$$f(1) = 2 + 1 \checkmark$$

$$f(0) = 0 + 1 \checkmark \qquad f(1) = 2 + 1 \checkmark$$

$$f(0) = 1 \checkmark \qquad f(1) = 3 \checkmark$$

$$\therefore P_1 = (0,1) \checkmark$$

$$\therefore P_1 = (0,1) \checkmark \qquad \therefore P_2 = (1,3) \checkmark$$



Let
$$x = 2$$
:

$$f(x) = -\frac{1}{2}x + 3\checkmark$$

$$f(x) = -\frac{1}{2}x + 3\checkmark$$

2. Let
$$x = -2$$
: \checkmark

$$f(x) = -\frac{1}{2}x + 3\checkmark$$

$$f(x) = -\frac{1}{2}x + 3\checkmark$$

$$f(-2) = -\frac{1}{2}(-2) + 3\checkmark$$

$$f(2) = -\frac{1}{2}(2) + 3\checkmark$$

$$f(-2) = 1 + 3\checkmark$$

$$f(2) = -1 + 3\checkmark$$

$$f(2) = 2\checkmark$$

$$f(2) = 2\checkmark$$

$$f(3) = (-2, 4)\checkmark$$

$$f(3) = (-2, 2)\checkmark$$

$$f(2) = -\frac{1}{2}(2) + 3\sqrt{2}$$

$$f(-2)=1+3\checkmark$$

$$f(2) = -1 + 3\checkmark$$

$$f(-2) = 4\checkmark$$

$$f(2) = 2\checkmark$$

$$\therefore P_1 = (-2,4)\checkmark \qquad \qquad \therefore P_2 = (2,2)\checkmark$$

3. Let
$$f(x) = 0$$
: \checkmark Let $x = 0$: \checkmark

$$f(x) = \frac{4}{3}x - 4\checkmark \qquad f(x) = \frac{4}{3}x - 4\checkmark$$

$$0 = \frac{4}{3}x - 4\checkmark \qquad f(0) = \frac{4}{3}(0) - 4\checkmark$$

$$\frac{4}{3}x - 4 = 0\checkmark \qquad f(0) = 0 - 4\checkmark$$

$$f(x) = \frac{4}{2}x - 2$$

$$0 = \frac{4}{3}x - 4\sqrt{}$$

$$f(0) = -(0) - 4$$

$$\frac{4}{4}x = 4\sqrt{}$$

$$\therefore b = -4$$

$$\frac{3}{4}(\frac{4}{3})x = \frac{3}{4}(4)$$

$$x = 3\checkmark$$

Lesson 2.4.3: Graphing Linear Functions Total points = 48

1. Let
$$x = 0$$
: \checkmark Let $x = 1$: \checkmark

$$f(x) = 2x + 1 \checkmark \qquad f(x) = 2x + 1 \checkmark$$

$$f(0) = 2(0) + 1 \checkmark$$
 $f(1) = 2(1) + 1 \checkmark$
 $f(0) = 0 + 1 \checkmark$ $f(1) = 2 + 1 \checkmark$

$$f(0) = 1 \checkmark \qquad \qquad f(1) = 3 \checkmark$$

$$\therefore P_1 = (0,1) \checkmark \qquad \therefore P_2 = (1,3) \checkmark$$

2. Let
$$x = -2$$
: \checkmark

Let
$$x = 2$$
:

$$f(x) = -\frac{1}{2}x + 3\checkmark$$

$$f(x) = -\frac{1}{2}x + 3x$$

2. Let
$$x = -2$$
: \checkmark Let $x = 2$: \checkmark

$$f(x) = -\frac{1}{2}x + 3\checkmark \qquad f(x) = -\frac{1}{2}x + 3\checkmark$$

$$f(-2) = -\frac{1}{2}(-2) + 3\checkmark \qquad f(2) = -\frac{1}{2}(2) + 3\checkmark$$

$$f(-2) = 1 + 3\checkmark \qquad f(2) = -1 + 3\checkmark$$

$$f(-2) = 4\checkmark \qquad f(2) = 2\checkmark$$

$$\therefore P_1 = (-2, 4)\checkmark \qquad \therefore P_2 = (2, 2)\checkmark$$

$$f(-2)=1+3\checkmark$$

$$f(2) = -1 + 3\sqrt{}$$

$$f(-2) = 4\sqrt{}$$

$$P_1 = (-2, 4)$$

3. Let
$$f(x) = 0 : \checkmark$$
 Let $x = 0 : \checkmark$

$$f(x) = \frac{4}{3}x - 4\sqrt{3}$$

$$f(x) = \frac{4}{3}x - 4\checkmark$$

$$0 = \frac{4}{3}x - 4$$

3. Let
$$f(x) = 0$$
: V

Let $x = 0$: V

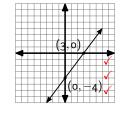
 $f(x) = \frac{4}{3}x - 4\sqrt{}$
 $f(x) = \frac{4}{3}x - 4\sqrt{}$
 $f(x) = \frac{4}{3}(0) - 4\sqrt{}$
 $\frac{4}{3}x - 4 = 0$
 $f(x) = \frac{4}{3}(0) - 4\sqrt{}$

$$-x-4=0$$

$$\frac{-3}{3}$$
 - 4 + 4 -

$$-x = 4$$

$$\frac{3}{4}(\frac{1}{3})x = \frac{3}{4}(4)$$



Lesson 2.4.3: Graphing Linear Functions Total points = 48

1. Let
$$x = 0$$
: \checkmark Let $x = 1$: \checkmark $f(x) = 2x + 1\checkmark$ $f(x) = 2x + 1\checkmark$

$$f(x) = 2x + 1 \checkmark \qquad f(x) = 1$$

$$f(0) = 2(0) + 1 \checkmark f(1) = 2(1) + 1 \checkmark$$

$$f(\mathtt{1}) = \mathtt{2}(\mathtt{1}) +$$

$$f(0) = 0 + 1 \checkmark \qquad f(1) = 2 + 1 \checkmark$$

$$f(0) = 1 \checkmark \qquad f(1) = 3 \checkmark$$

$$\therefore P_1 = (0, 1) \checkmark \qquad \therefore P_2 = (1, 3) \checkmark$$

$$f(1) = 2 + 1$$

$$(1) = 3$$

$$\therefore P_1 = (0,1) \checkmark$$

2. Let
$$x = -2$$
:

Let
$$x = 2$$
:

$$f(x) = -\frac{1}{2}x + 3$$

$$f(x) = -\frac{1}{2}x + 3\sqrt{3}$$

$$f(x) = -\frac{1}{2}x + 3\checkmark \qquad f(x) = -\frac{1}{2}x + 3\checkmark$$

$$f(-2) = -\frac{1}{2}(-2) + 3\checkmark \qquad f(2) = -\frac{1}{2}(2) + 3\checkmark$$

$$f(-2) = 1 + 3\checkmark \qquad f(2) = -1 + 3\checkmark$$

$$f(-2) = 4\checkmark \qquad f(2) = 2\checkmark$$

$$\therefore P_1 = (-2, 4)\checkmark \qquad \therefore P_2 = (2, 2)\checkmark$$

$$f(a) = 1 \cdot a$$

$$f(-2)=4\checkmark$$

$$f(z) = z \sqrt{ }$$

$$\therefore P_1 = (-2,4) \checkmark$$

$$f(2) = 2\sqrt{}$$

3. Let
$$f(x) = 0 : \checkmark$$
 Let $x = 0 : \checkmark$

$$\therefore P_2 = (:$$

$$f(x) = \frac{4}{3}x - 4\checkmark$$
 $f(x) = \frac{4}{3}x - 4\checkmark$

$$f(x) = \frac{4}{3}x - 4$$

$$0 = \frac{4}{3}x - 4\checkmark$$

$$f(0) = \frac{4}{3}(0) - 4$$

$$\frac{1}{2}x - 4 = 0$$

$$I(0) = 0 - 4$$

$$\frac{-x}{3}$$

$$-x - 4 + 4 = 0 + 3$$

$$\frac{4}{3}x = 4\sqrt{}$$

$$\frac{3}{4}(\frac{4}{3})x = \frac{3}{4}(4)$$

Lesson 2.4.3: Graphing Linear Functions Total points = 48

1. Let
$$x = 0$$
: \checkmark Let $x = 1$:

$$f(y) = 2y \pm 1$$
, $f(y) = 2y \pm 1$

1. Let
$$x = 0$$
: \checkmark Let $x = 1$: \checkmark

$$f(x) = 2x + 1 \checkmark \qquad f(x) = 2x + 1 \checkmark$$

$$f(0) = 2(0) + 1 \checkmark \qquad f(1) = 2(1) + 1 \checkmark$$

$$f(0) = 0 + 1$$
 $f(1) = 2 + 1$

$$f(0) = 0 + 1 \checkmark \qquad f(1) = 2 + 1 \checkmark$$

$$f(0) = 1 \checkmark \qquad f(1) = 3 \checkmark$$

$$\therefore P_1 = (0, 1) \checkmark \qquad \therefore P_2 = (1, 3) \checkmark$$

2. Let
$$x = -2$$
: \checkmark

Let
$$x = 2$$
:

$$f(x) = -\frac{1}{2}x + 3\checkmark \qquad f(x) = -\frac{1}{2}x + 3\checkmark$$

$$f(-2) = -\frac{1}{2}(-2) + 3\checkmark \qquad f(2) = -\frac{1}{2}(2) + 3\checkmark$$

$$f(x) = -\frac{1}{x} + 3$$

$$f(-2) = -\frac{1}{2}(-2)$$

$$f(-2) = 4$$

$$f(z) - z$$

$$f(-2) = 1 + 3\checkmark$$

$$f(2) = -1 + 3\checkmark$$

$$f(2) = 2\checkmark$$

$$f(2) = 2\sqrt{}$$

3. Let
$$f(x) = 0 : \checkmark$$
 Let $x = 0 : \checkmark$

$$f(x) = \frac{4}{3}x - 4$$

$$f(x) = \frac{4}{3}x - 4\checkmark$$

$$0 = \frac{4}{3}x - 4v$$

$$f(0) = \frac{4}{3}(0) - 4$$

$$\frac{1}{3}x - 4 = 0$$

$$f(0) = 0 -$$

$$\frac{1}{3}x - 4 + 4 = 0 + 4\sqrt{3}$$

$$\frac{4}{3}x = 4\checkmark$$



∴ *a* = 3 √

