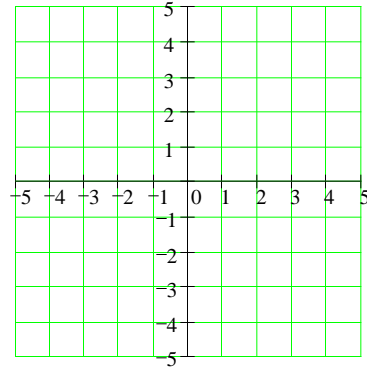


2.3 The Coordinate Plane



1)

- a) $(-3, 1)$: Quadrant II
- b) $(-2, -4)$: Quadrant III
- c) $(3, 0)$: Between Quadrants IV and I
- d) $(2, 1)$: Quadrant I
- e) $(1, -3)$: Quadrant IV

3)

- a) Any point (x, y) where $x > 0$ and $y > 0$ lies in Quadrant I.
- b) Any point (x, y) where $x < 0$ and $y > 0$ lies in Quadrant II.
- c) Any point (x, y) where $x < 0$ and $y < 0$ lies in Quadrant III.
- d) Any point (x, y) where $x > 0$ and $y < 0$ lies in Quadrants IV.
- e) Any point (x, y) where $x < 0$ and $y = 0$ lies between quadrants II and III.

5)

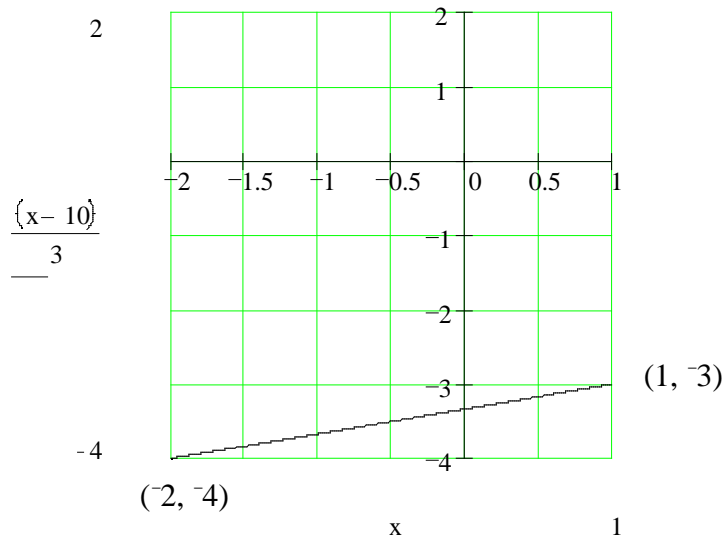
- a) Any point of the form $(2, y)$ is acceptable, where y is any real number.
- b) $x = 2$
- c) infinitely many points

7) $(-7, -1)$

9) We need a run 1 and a rise of 9.

11)

a)



b) Run = 3

Rise = 1

c) $d = \sqrt{10} \approx 3.16$

13) $r = \sqrt{10} \approx 3.16$

15) 9 square units

17) $\frac{11}{2}$

19)

a) 8

b) -56

c) -21

d) -1.25