

June 17, 2015

Date _____ Period _____

For each set of ordered pairs: a) draw a mapping, b) draw a graph, c) draw a table, d) decide if it is a function, if so, is it a linear function, e) determine the domain and range.

1) $\{(0,2), (1,4), (2,6), (3,8)\}$

Is it a function? _____

Is it a linear function? _____

Domain _____

Range _____

2) $\{(0,2), (1,1), (2,6), (3,5)\}$

Is it a function? _____

Is it a linear function? _____

Domain _____

Range _____

3) $\{(0,1), (1,2), (2,3), (1,4), (0,5)\}$

Is it a function? _____

Is it a linear function? _____

Domain _____

Range _____

4) $\{(-2,3), (-1,2), (0,1), (1,0)\}$

Is it a function? _____

Is it a linear function? _____

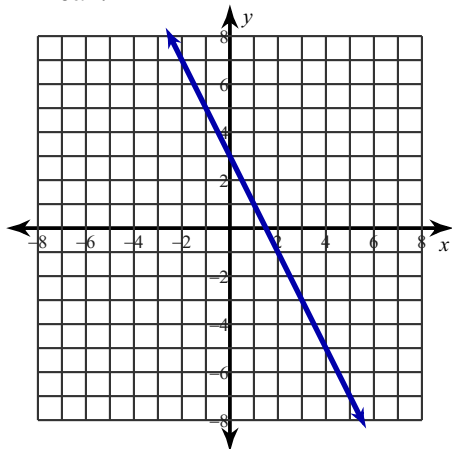
Domain _____

Range _____

Determine if the following graphs represent functions. If so, determine if it is a linear function.

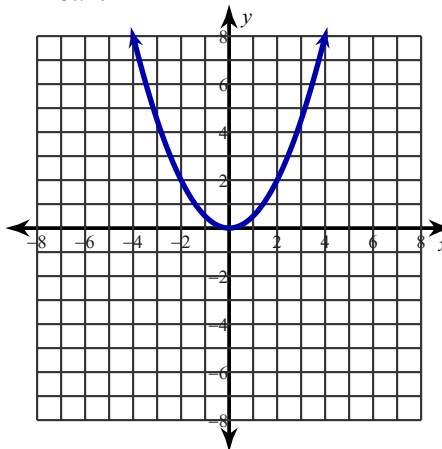
5) Function?

Linear?

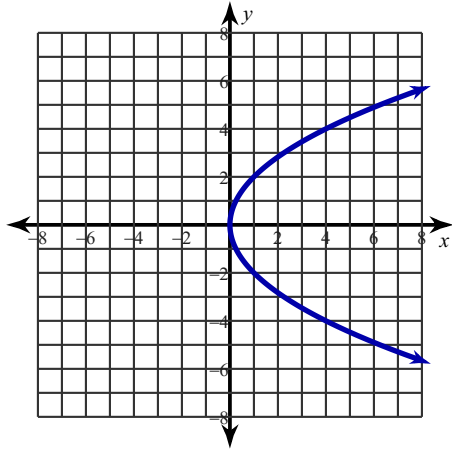


6) Function?

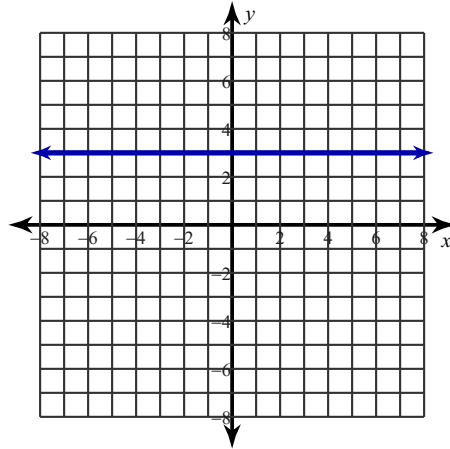
Linear?



7) Function?
Linear?



8) Function?
Linear?



Determine if the following sets of ordered pairs represent functions. If so, do they represent linear functions?

9) $\{(-1, 0), (0, 1), (1, 2), (2, 3)\}$

10) $\{(-1, 0), (0, 2), (1, 4), (0, 6), (-1, 8)\}$

11) $\{(-1, 2), (0, -1), (-1, -4), (-2, -7)\}$

12) $\{(-1, 6), (0, -1), (-1, 3), (-2, 8)\}$

Write the slope-intercept form of the equation of each line given the slope and y-intercept.

13) Slope = -2 , y-intercept = -3

14) Slope = $-\frac{3}{2}$, y-intercept = -2

Write the slope-intercept form of the equation of the line through the given point with the given slope.

15) through: $(-5, 3)$, slope = $\frac{1}{5}$

16) through: $(-3, -5)$, slope = $\frac{1}{3}$

17) through: $(-2, -1)$, slope = $\frac{1}{2}$

18) through: $(3, -3)$, slope = $-\frac{2}{3}$

Write the slope-intercept form of the equation of the line through the given points.

19) through: $(2, 1)$ and $(0, -1)$

20) through: $(2, -4)$ and $(4, -1)$

21) through: $(0, 2)$ and $(-2, -1)$

22) through: $(0, 5)$ and $(2, 2)$

Write the slope-intercept form of the equation of the line described.

23) through: $(-1, -3)$, parallel to $y = 8x - 2$

24) through: $(3, -2)$, parallel to $y = 2x - 1$

25) through: $(5, -3)$, parallel to $y = x - 5$

26) through: $(4, -1)$, parallel to $y = \frac{3}{4}x - 2$

27) through: $(-3, 2)$, perp. to $y = \frac{1}{2}x + 5$

28) through: $(-4, -4)$, perp. to $y = -x - 1$

29) through: $(-3, -5)$, perp. to $y = -\frac{3}{5}x + 1$

30) through: $(5, 5)$, perp. to $y = -\frac{5}{8}x - 1$

Write the slope-intercept form of the equation of each line. Use point -slope form.

31) through: $(4, -1)$ and $(3, 0)$

32) through: $(-5, 5)$ and $(0, -4)$

33) through: $(3, -3)$ and $(5, 3)$

34) through: $(-3, 3)$ and $(0, -1)$

Answers to June 17, 2015 (ID: 1)

1)

5)

9)

13) $y = -2x - 3$

17) $y = \frac{1}{2}x$

21) $y = \frac{3}{2}x + 2$

25) $y = x - 8$

29) $y = \frac{5}{3}x$

33) $y = 3x - 12$

2)

6)

10)

14) $y = -\frac{3}{2}x - 2$

18) $y = -\frac{2}{3}x - 1$

22) $y = -\frac{3}{2}x + 5$

26) $y = \frac{3}{4}x - 4$

30) $y = \frac{8}{5}x - 3$

34) $y = -\frac{4}{3}x - 1$

3)

7)

11)

15) $y = \frac{1}{5}x + 4$

19) $y = x - 1$

23) $y = 8x + 5$

27) $y = -2x - 4$

31) $y = -x + 3$

4)

8)

12)

16) $y = \frac{1}{3}x - 4$

20) $y = \frac{3}{2}x - 7$

24) $y = 2x - 8$

28) $y = x$

32) $y = -\frac{9}{5}x - 4$