

Classroom Voting Questions: Precalculus

1.1 Functions and Change

1. In the given equation, is y a function of x ?

$$y = x + 2$$

- (a) Yes
- (b) No

2. In the given equation, is y a function of x ?

$$x + y = 5$$

- (a) Yes
- (b) No

3. In the given equation, is y a function of x ?

$$x^3 + y = 5$$

- (a) Yes
- (b) No

4. In the given equation, is y a function of x ?

$$x^2 + y^2 = 5$$

- (a) Yes
- (b) No

5. Does the table represent a function, $y = f(x)$?

x	1	2	3	4
$f(x)$	2	3	2	4

- (a) Yes
- (b) No

6. Does the table represent a function, $y = f(x)$?

x	1	2	2	4
$f(x)$	2	3	1	3

- (a) Yes
- (b) No

7. Does this sentence describe a function? Wanda is two years older than I am.

- (a) Yes
- (b) No

8. Could this table represent a linear function?

x	1	2	3	4
$f(x)$	1	2	4	8

- (a) Yes
- (b) No

9. Could this table represent a linear function?

x	1	2	3	4
$f(x)$	-12	-9	-6	-3

- (a) Yes
- (b) No

10. Could this table represent a linear function?

x	1	2	4	8
$f(x)$	12	14	16	18

- (a) Yes
- (b) No

11. Could this table represent a linear function?

x	1	2	4	8
$f(x)$	10	9	7	3

- (a) Yes
- (b) No

12. True or False? All linear functions are examples of direct proportionality.

- (a) True
- (b) False

13. Which of the following functions has its domain identical with its range?

- (a) $f(x) = x^2$
- (b) $g(x) = \sqrt{x}$
- (c) $h(x) = x^4$
- (d) $i(x) = |x|$

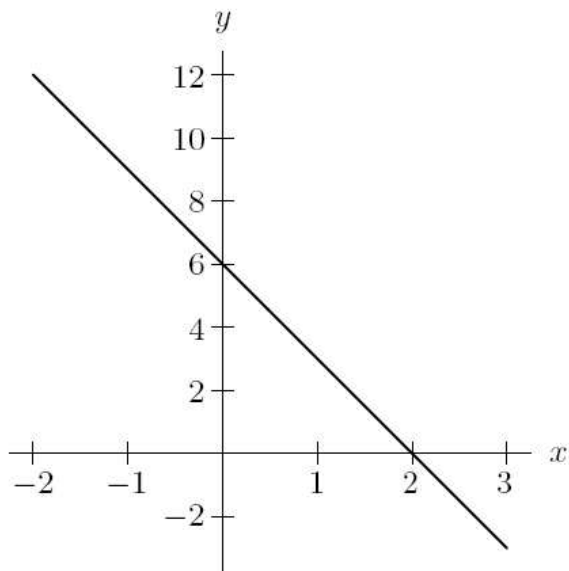
14. The slope of the line connecting the points (1,4) and (3,8) is

- (a) $-\frac{1}{2}$
- (b) -2
- (c) $\frac{1}{2}$
- (d) 2

15. Which one of these lines has a different slope than the others?

- (a) $y = 3x + 2$
- (b) $3y = 9x + 4$
- (c) $3y = 3x + 6$
- (d) $2y = 6x + 4$

16. The graph below represents which function?



- (a) $y = 6x + 6$
- (b) $y = -3x + 6$
- (c) $y = -3x + 2$
- (d) $y = -x + 6$
- (e) $y = 6x - 2$
- (f) $y = x - 2$

17. Which of the following functions is not increasing?

- (a) The elevation of a river as a function of distance from its mouth
- (b) The length of a single strand of hair as a function of time
- (c) The height of a person from age 0 to age 80
- (d) The height of a redwood tree

18. Which of these graphs does not represent y as a function of x ?

