

DIRECTIONS

Answers without work to check. If you cannot find your mistake then please seek help EARLY! This assignment is worth 4 pts. 1) did you complete it 2) did you show all the work 3) did you correct in pen 4) did you get 75% of the problems correct?

3.1 WS A answers. Check the ones you were supposed to do for your assignment.

1. no; The inputs 8 and 4 have two different outputs.
2. yes; Every input has exactly one output.
3. yes; No vertical line can be drawn through more than one point on the graph.
4. no; You can draw a vertical line that passes through more than one point on the graph.
5. The domain is $-3, -1, 0, 1, \text{ and } 3$. The range is $0, 2, \text{ and } 3$.
6. The domain is $-2, -1, 0, 1, \text{ and } 2$. The range is $-2, -1, 0, 1, \text{ and } 2$.
7. a. independent: x members, dependent: cost y
b. The domain is $1, 2, 3, 4, 5, \text{ and } 6$. The range is $42, 49, 56, 63, 70, \text{ and } 77$.
8. no; Each teacher has 30 students, so there is more than one output (students) per input (teacher).
9. yes; Each weight has exactly one cost.

3.1 WS B answers. Check the ones you were supposed to do for your assignment.

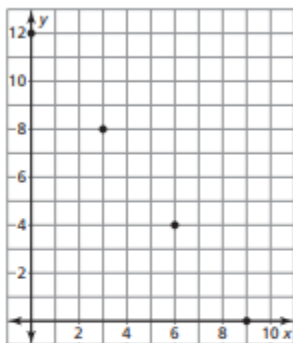
1. no; The input 1 has two different outputs.
2. yes; Every input has exactly one output.
3. yes; No vertical line can be drawn through more than one point on the graph.
4. no; You can draw a vertical line that passes through more than one point on the graph.
5. The domain is $-1 \leq x \leq 3$. The range is $-8 \leq y \leq 8$.
6. The domain is $1 \leq x < 2$, $2 < x < 4$, and $4 < x \leq 6$. The range is $1 \leq y < 3$, $3 < y < 5$, and $5 < y \leq 6$.

7. a. $y = -\frac{4}{3}x + 12$

b. *Sample answer:*

Input, x	0	3	6	9
Output, y	12	8	4	0

c. *Sample answer:*



8. domain: $-\infty < x < \infty$, range: $y \geq 2$
9. domain: $-\infty < x < \infty$, range: $y \leq 1$
10. domain: $-\infty < x < \infty$, range: $y \leq -3$

3.1 pg. 108: answers. Check the ones you were supposed to do for your assignment.

18. a. y is the dependent variable and x is the independent variable.

b. domain: $0 \leq x \leq 20$; range: $2.8 \leq y \leq 72.8$

21. The amount of time is the dependent variable and the number of quarters is the independent variable.

22. The battery power remaining is the dependent variable and the amount of time you listen is the independent variable.

23. a. *Sample answer:* The balance of the savings account is \$100 in month 0 and increases by \$25 per month through month 4.

b. $(0, 100), (1, 125), (2, 150), (3, 175), (4, 200)$

