

Inclass Review

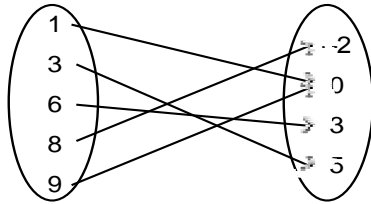
Ch.5 Relations & Functions

Sections 5.1 – 5.5

Section 3.7

1. Which is the correct ordered pair for the relation below?

1. __



(A) $\{ (1,-2), (3,0), (6,3), (8,5), (9,5) \}$ (C) $\{ (-2, 8), (0, 1), (0,9), (3,6), (5,3) \}$

(B) $\{ (1,0), (3,5), (6,3), (8, -2), (9,0) \}$ (D) $\{ (-2, 1), (0, 3), (3,6), (5,9), (0,3) \}$

2. Which set of ordered pairs represents a function?

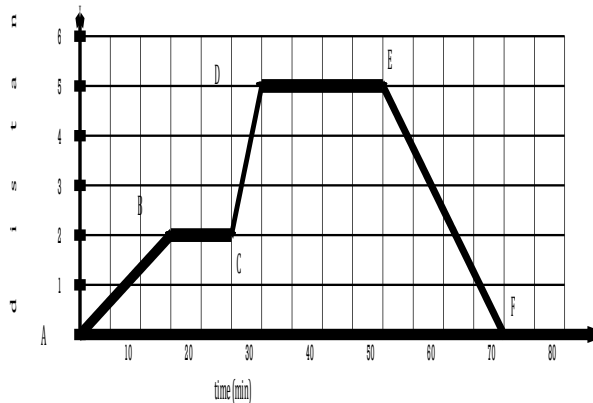
2. __

(A) $\{ (1,0), (3,5), (6,3), (1, -2), (9,0) \}$ (C) $\{ (5,5), (6,6), (7,7), (7, -6), (0,0) \}$

(B) $\{ (0,0), (2,0), (6,0), (8, 0), (9,0) \}$ (D) $\{ (1,0), (3,5), (6,3), (8, -2), (3,0) \}$

3. The graph below shows activity during a bike ride. What does interval EF indicate?

3. __



(A) Biker stops at a friend's house (C) Biker returns home

(B) Biker is riding down a hill (D) Biker is stopped

4. Which is the domain for the graph to the right?

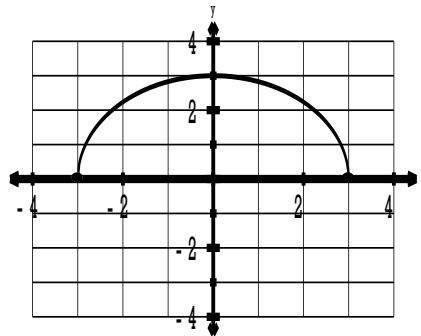
4. __

(A) $\{ y \mid -3 \leq y \leq 3, y \in \mathbb{R} \}$

(B) $\{ x \mid -3 \leq x \leq 3, x \in \mathbb{R} \}$

(C) $\{ y \mid 0 \leq y \leq 3, y \in \mathbb{R} \}$

(D) $\{ x \mid -3 < x \leq 3, x \in \mathbb{R} \}$



5. Which is the range for the graph to the right?

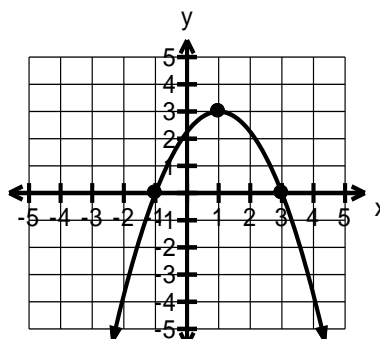
5. __

(A) $\{ y \mid -1 \leq y \leq 3, y \in \mathbb{R} \}$

(B) $\{ x \mid -1 \leq x \leq 3, x \in \mathbb{R} \}$

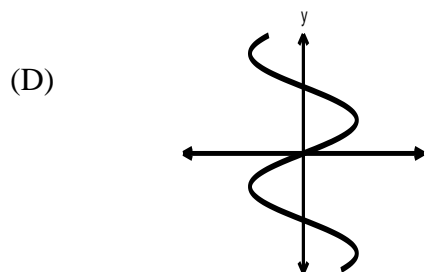
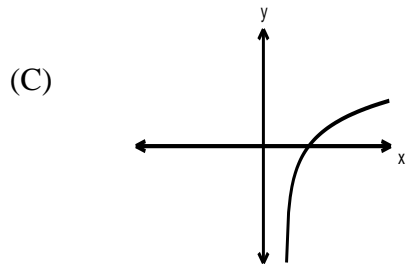
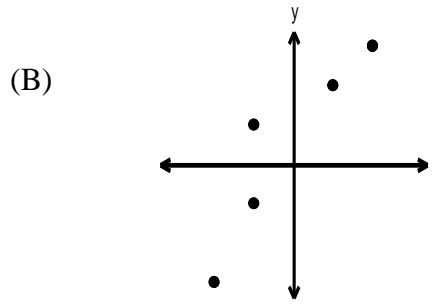
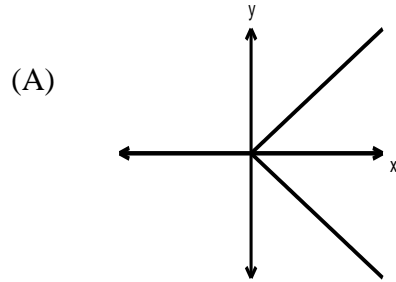
(C) $\{ y \mid y \leq 3, y \in \mathbb{R} \}$

(D) $\{ x \mid -5 < y \leq 3, y \in \mathbb{R} \}$

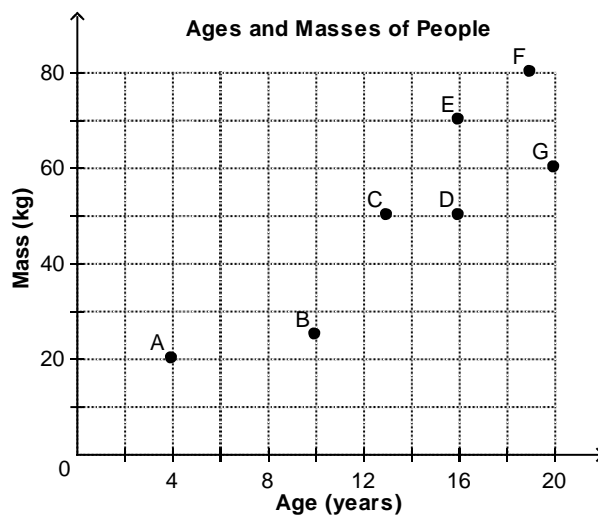


6. Which of the following is a function?

6. __



The graph below is to be used to answer questions 7 and 8. Each point represents a person.



7. Which two people are the same mass?

7. __

- (A) E and F (C) D and E
 (B) C and D (D) B and C

8. Which two people in the graph are the same age?

8. __

- (A) E and F (C) D and E
 (B) C and D (D) B and C

9. If $g(x) = -2x - 3$ then which is the value for $g(-4)$?

9. __

- (A) 5 (C) -11
 (B) 9 (D) -5

10. If $h(x) = 6x + 3$ then which represents x when $h(x) = -15$?

10. __

- (A) -3 (C) -87
 (B) 2 (D) -10

11. Which ordered pair represents $P(-2) = 5$?

11. ___

- (A) $(-5, 2)$ (C) $(-2, 5)$
(B) $(2, -5)$ (D) $(5, -2)$

12. Which represents function notation for $H = 10 - 7y$?

- (A) $H(y) = 10 - 3y$ (B) $y(H) = 10 - 3H$ (C) $H(y) = 10 - 3H$ (D) $y(H) = 10 - 3y$

13. The price of a cab ride is given by the cost function: $C(t) = 1.5t + 5$ where $C(t)$ is the cost in dollars and t is the time in minutes.

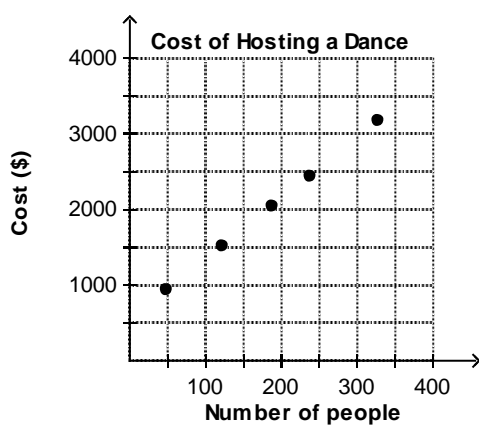
(A) If the cost is \$35 then determine t .

(B) What does your answer in 13 (A) mean? Explain in a full sentence.

(C) Determine the range value if the domain value is 10.

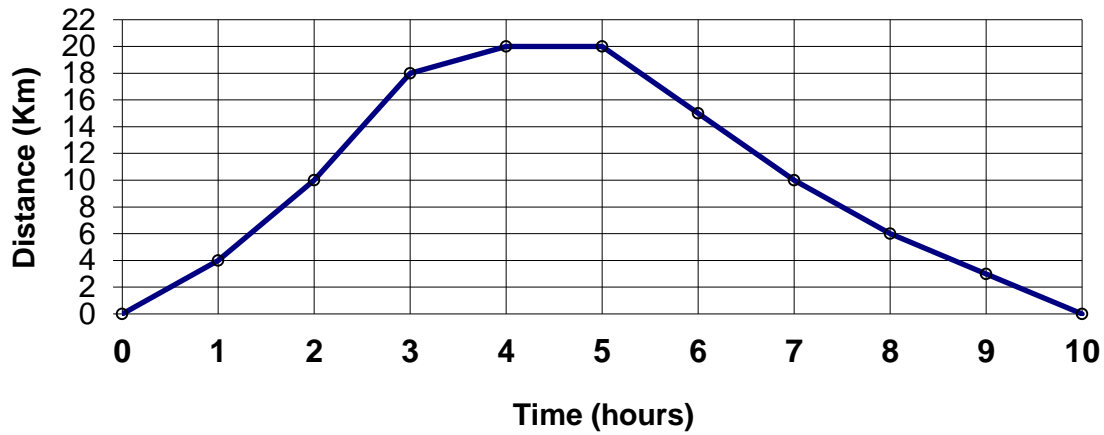
(D) Write your answer from 13 (C) as an ordered pair.

14. Should the points in the graph below be connected? Explain.



15. Given the graph below answer the questions that follow.

Bobby's travel from home to the rink



- (A) How far is Bobby's rink from home?
- (B) How long was Bobby at the rink?
- (C) How long did it take for Bobby to get to the rink?
- (D) How long was the return trip to home from the rink?
- (E) How much time did it take to leave home, go to the rink and return home?
- (F) If Bobby left at 10:00am to go to the rink then when did he leave the rink to come home?
- (G) What does the 4 to 5 hour segment represent?

ANSWERS:

1. B 2. B 3. C 4. D 5. C 6. C 7. B 8. C 9. A 10. A 11. C 12. A
- 13.(A) 20 minutes (B) A 20 minute cab ride cost \$35.
(C) \$20 (D) (10, 20)
14. No. People are discrete data and it is not possible to have part of a person.
- 15.(A) 20 km (B) 1 hour (C) 4 hours (D) 5 hours (E) 10 hours (F) 3 pm
(G) He stopped for 1 hour at the rink.

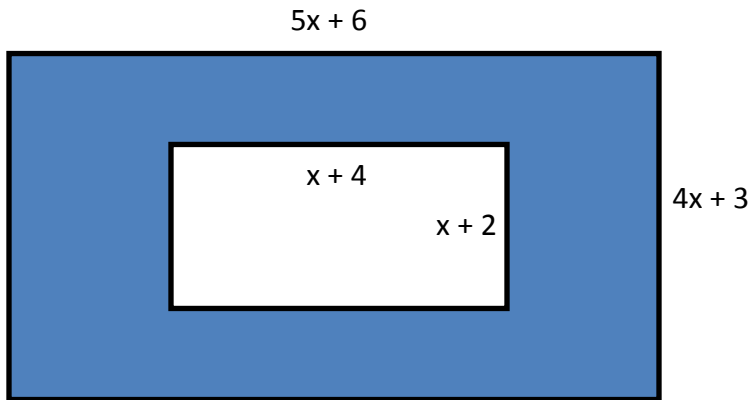
Section 3.7:

1. Expand and simplify:

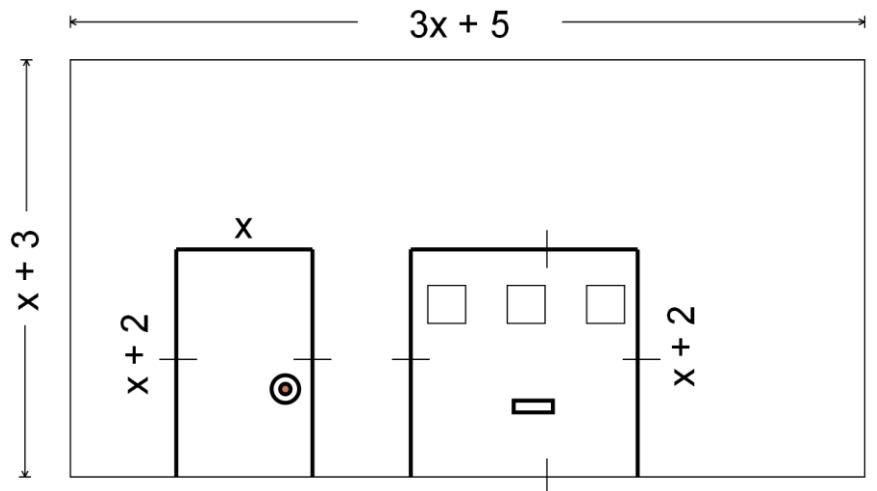
(a) $(4x - 5y)^2$ (b) $(x - 2)(x^2 + 2x + 4)$

(c) $3x(2x - 3)^2 - 5(x + 2)(x - 2)$

2. Determine the area of the shaded region in expanded form.



3. You plan to put siding on the front of your garage pictured below. Find an expression (in simplest form) to represent the area of the surface to be covered with siding. (Note: There will be **NO** siding on the two doors.)



ANSWERS:

1(a) $16x^2 - 40xy + 25y^2$

(b) $x^3 - 8$

(c) $12x^3 - 41x^2 + 27x + 20$

2. $19x^2 + 33x + 10$

3. $x^2 + 8x + 11$