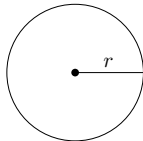
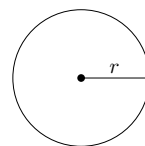


1. c
2. g
3. c
4. d
- 5.
- 6.
- 7.
8. Dimensions: 61 ft by 122 ft
9. Question:  $(3x^2 + 18x - 10) \div (x + 7)$   
Solution:  $3x - 3 + \frac{11}{x + 7}$
10. Received 14.60 inches of rain, 18% less rain than normal. Normal is 17.80 inches.
11. Formula  $s = \sqrt{21 \cdot d}$ . Deer is 80 feet away.
  - (a) If speed is 50 miles per hour, she will skid 119.048 feet.
  - (b) She will hit the deer.
12.  $\begin{cases} 2x + y = 7 \\ -5x + 5y = 5 \end{cases}$  ; solution (2,3)
13.
  - (a) 3
  - (b) Domain:  $[-8, 0]$
  - (c) Range:  $[-1, 7]$
14.  $9\pi$   




1. c
2. a
3. f
4. d
5. Solution content.
- 6.
- 7.
8. Largest area:  $11552 \text{ ft}^2$
9. Question:  $(4x^2 + 11x - 7) \div (x + 4)$   
Solution:  $4x - 5 + \frac{13}{x + 4}$
10. Paid \$1580.37 for a desk that was 13% off. Original cost was \$1816.52.

11. Formula  $s = \sqrt{27 \cdot d}$ . Deer is 65 feet away.
  - (a) If speed is 35 miles per hour, she will skid 45.37 feet.
  - (b) She will not hit the deer.
12. 
$$\begin{cases} -2x + y = 6 \\ -4x + 3y = 12 \end{cases} ; \text{solution } (-3, 0)$$
13.
  - (a)  $-3$
  - (b) Domain:  $[-8, 0]$
  - (c) Range:  $[-9, -1]$
14.  $25\pi$





1. h

2. e

3. a

4. a

5.

6.

7.

8. Dimensions: 72 ft by 144 ft

9. Question:  $(4x^2 + 22x - 30) \div (x + 7)$ Solution:  $4x - 6 + \frac{12}{x + 7}$ 

10. Received 10.95 inches of rain, 12% less rain than normal. Normal is 12.44 inches.

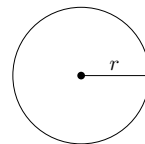
11. Formula  $s = \sqrt{24 \cdot d}$ . Deer is 80 feet away.

(a) If speed is 55 miles per hour, she will skid 126.042 feet.

(b) She will hit the deer.

12. 
$$\begin{cases} 2x + 4y = -18 \\ x - 3y = 1 \end{cases} ; \text{solution } (-5, -2)$$

13. (a) 1

(b) Domain:  $[0, 8]$ (c) Range:  $[1, 9]$ 14.  $9\pi$ 



1. c

2. a

3. b

4. b

5.

6.

7.

8. Dimensions: 62 ft by 124 ft

9. Question:  $(3x^2 + 7x - 32) \div (x + 5)$ Solution:  $3x - 8 + \frac{8}{x+5}$ 

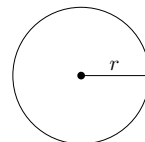
10. Received 11.11 inches of rain, 14% less rain than normal. Normal is 12.92 inches.

11. Formula  $s = \sqrt{30 \cdot d}$ . Deer is 75 feet away.

(a) If speed is 50 miles per hour, she will skid 83.333 feet.

(b) She will hit the deer.

12. 
$$\begin{cases} x - 5y = -14 \\ -5x - 5y = 10 \end{cases} ; \text{solution } (-4, 2)$$

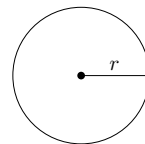
13. (a)  $-7$ (b) Domain:  $[-4, 4]$ (c) Range:  $[-9, -1]$ 14.  $25\pi$ 





1. g
2. b
3. a
4. a
- 5.
- 6.
- 7.
8. Largest area:  $8712 \text{ ft}^2$
9. Question:  $(4x^2 + 18x - 26) \div (x + 6)$   
Solution:  $4x - 6 + \frac{10}{x + 6}$
10. Received 13.34 inches of rain, 14% less rain than normal. Normal is 15.51 inches.

11. Formula  $s = \sqrt{21 \cdot d}$ . Deer is 65 feet away.
  - (a) If speed is 25 miles per hour, she will skid 29.762 feet.
  - (b) She will not hit the deer.
12.  $\begin{cases} -2x - 5y = -35 \\ 5x + y = 30 \end{cases}$  ; solution (5,5)
13.
  - (a) 3
  - (b) Domain:  $[-4, 4]$
  - (c) Range:  $[1, 9]$
14.  $25\pi$





1. h

2. b

3. h

4. b

5.

6.

7.

8. Largest area:  $5408 \text{ ft}^2$ 9. Question:  $(3x^2 + 11x - 34) \div (x + 6)$ Solution:  $3x - 7 + \frac{8}{x + 6}$ 

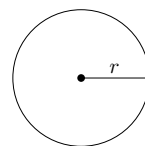
10. Desk marked up 14% to \$1488.25. Was originally \$1305.48.

11. Formula  $s = \sqrt{30 \cdot d}$ . Deer is 80 feet away.

(a) If speed is 40 miles per hour, she will skid 53.333 feet.

(b) She will not hit the deer.

12. 
$$\begin{cases} 3x + y = -4 \\ -4x + 5y = -1 \end{cases} ; \text{solution } (-1, -1)$$

13. (a)  $-3$ (b) Domain:  $[-8, 0]$ (c) Range:  $[-9, -1]$ 14.  $4\pi$ 



1. c

2. a

3. f

4. d

5.

6.

7.

8. Dimensions: 61 ft by 122 ft

9. Question:  $(2x^2 + 8x - 28) \div (x + 7)$ Solution:  $2x - 6 + \frac{14}{x + 7}$ 

10. Paid \$1475.98 for a desk that was 15% off. Original cost was \$1736.45.

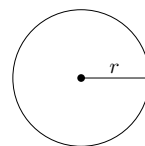
11. Formula  $s = \sqrt{30 \cdot d}$ . Deer is 75 feet away.

(a) If speed is 40 miles per hour, she will skid 53.333 feet.

(b) She will not hit the deer.

12. 
$$\begin{cases} -3x + 4y = -7 \\ x - 3y = 9 \end{cases} ; \text{solution } (-3, -4)$$

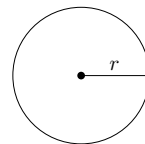
13. (a) 7

(b) Domain:  $[-2, 6]$ (c) Range:  $[1, 9]$ 14.  $16\pi$ 



1. d
2. a
3. a
4. d
- 5.
- 6.
- 7.
8. Largest area:  $11858 \text{ ft}^2$
9. Question:  $(4x^2 + 16x - 36) \div (x + 6)$   
Solution:  $4x - 8 + \frac{12}{x + 6}$
10. Received 12.61 inches of rain, 13% less rain than normal. Normal is 14.49 inches.

11. Formula  $s = \sqrt{30 \cdot d}$ . Deer is 60 feet away.
  - (a) If speed is 50 miles per hour, she will skid 83.333 feet.
  - (b) She will hit the deer.
12.  $\begin{cases} x + 5y = -18 \\ 5x - 5y = 0 \end{cases}$  ; solution  $(-3, -3)$
13.
  - (a)  $-3$
  - (b) Domain:  $[-8, 0]$
  - (c) Range:  $[-5, 3]$
14.  $25\pi$







1. c

2. f

3. j

4. b

5.

6.

7.

8. Largest area:  $6498 \text{ ft}^2$ 9. Question:  $(4x^2 + 16x - 39) \div (x + 6)$ Solution:  $4x - 8 + \frac{9}{x+6}$ 

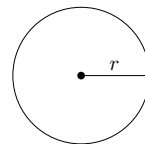
10. Received 11.73 inches of rain, 13% less rain than normal. Normal is 13.48 inches.

11. Formula  $s = \sqrt{27 \cdot d}$ . Deer is 60 feet away.

(a) If speed is 35 miles per hour, she will skid 45.37 feet.

(b) She will not hit the deer.

12. 
$$\begin{cases} x - 4y = 0 \\ -4x - 5y = -21 \end{cases} ; \text{solution } (4, 1)$$

13. (a)  $-3$ (b) Domain:  $[-8, 0]$ (c) Range:  $[-7, 1]$ 14.  $16\pi$ 



1. h

2. h

3. a

4. b

5.

6.

7.

8. Dimensions: 52 ft by 104 ft

9. Question:  $(4x^2 + 20x - 46) \div (x + 7)$ Solution:  $4x - 8 + \frac{10}{x + 7}$ 

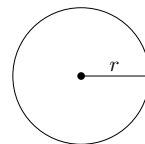
10. Desk marked up 15% to \$1968.68. Was originally \$1711.90.

11. Formula  $s = \sqrt{24 \cdot d}$ . Deer is 55 feet away.

(a) If speed is 25 miles per hour, she will skid 26.042 feet.

(b) She will not hit the deer.

12. 
$$\begin{cases} 3x + y = -8 \\ -4x + 5y = -21 \end{cases} ; \text{solution } (-1, -5)$$

13. (a)  $-3$ (b) Domain:  $[-8, 0]$ (c) Range:  $[-9, -1]$ 14.  $4\pi$ 



1. b
2. a
3. c
4. d
5. (a) First solution.  
(b) Second solution.
6. (a) First solution.  
(b) Second solution.
- 7.
8. Dimensions: 64 ft by 128 ft
9. Question:  $(3x^2 + 7x - 29) \div (x + 5)$   
Solution:  $3x - 8 + \frac{11}{x + 5}$
10. Desk marked up 17% to \$1614.25. Was originally \$1379.70.
11. Formula  $s = \sqrt{27 \cdot d}$ . Deer is 80 feet away.
  - (a) If speed is 40 miles per hour, she will skid 59.259 feet.
  - (b) She will not hit the deer.
12.  $\begin{cases} 3x - 5y = -30 \\ 5x + y = -22 \end{cases}$  ; solution  $(-5, 3)$
13. (a)  $-3$   
(b) Domain:  $[-2, 6]$   
(c) Range:  $[-5, 3]$
14.  $25\pi$   
