

pp. 303-304 (#8, 11, 12-16, 17, 18)

8. 100 mi

11. 110 mi

12. 75 in.

13. 15 in.

14. 3.84 m

15. 21.6 yd

16. 17.5 mm

17. The 5 cm should be in the numerator.

$$\frac{1 \text{ cm}}{20 \text{ m}} = \frac{5 \text{ cm}}{x \text{ m}}$$

$$x = 100 \text{ m}$$

18. 4 cm; 1 cm : 30 m

pp. 321-323 (#4-10, 14, 15, 17, 26-28)

- 4. 14 mm
- 5. $1\frac{3}{4}$ in.
- 6. 12 cm
- 7. 4 in.
- 8. 1.6 ft
- 9. about 31.4 in.
- 10. about 44 in.
- 14. a. *D*
b. *B*
- 15. about 7.71 ft
- 17. about 31.4 cm;
about 62.8 cm
- 26. 22 ft
- 27. 20 m
- 28. 65 in.

pp. 328-329 (#3-5, 9-14, 20-23)

- 3. 19.5 units
- 4. 20 units
- 5. 25.5 units
- 9. 56 m
- 10. 82 in.
- 11. 30 cm
- 12. The length of the rectangle was counted twice.
$$\text{Perimeter} = 4 + 3 + 4 + 5 + 4$$
$$= 20 \text{ in.}$$
- 13. about 26.85 in.
- 14. about 50.26 in.
- 20. 19.35
- 21. 279.68
- 22. 153.86
- 23. 205

p. 310 (17-18) p. 331 (1-14)

17. 5 cm; 10 : 3

18. 2.5 cm

1. 18 cm

2. 22 in.

3. 18 units

4. 21.4 units

5. 21 units

6. about 37.68 mm

7. about 4.71 ft

8. about 22 cm

9. 88 in.

10. about 49.12 ft

11. about 7.71 ft

12. about 25.12 mm

13. 60 ft

14. about 15.68 in.

pp. 336-337 (#3-4, 7-8, 11-12, 15, 16, 22-25)

3. about 254.34 mm^2

4. about 616 cm^2

7. about 3.14 cm^2

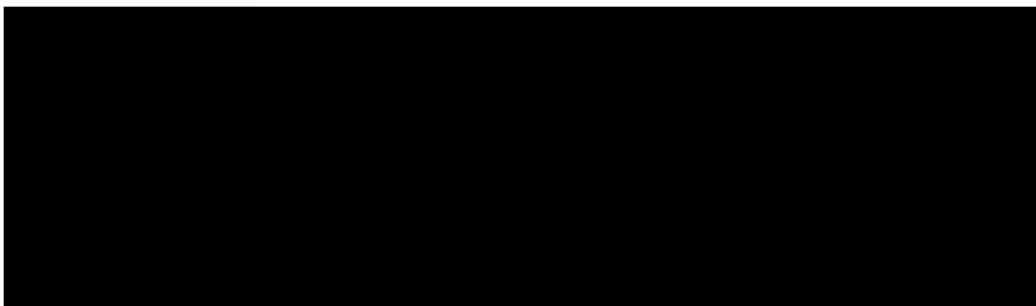
8. about 1.76625 ft^2

11. about 113.04 in.^2

12. about 1444.4 mi^2

15. about 1.57 ft^2

16. a.



b. The circumference doubles; The area becomes four times as great.

c. The circumference triples; The area becomes 9 times as great.

22. 44

23. 53

24. 73

25. A

pp. 342-343 (#4-7, 9-10, 13-14, 16, 18-22)

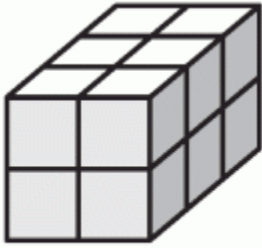
- 4. 33 units^2
- 5. 25 units^2
- 6. 30 units^2
- 7. 25 units^2
- 9. 132 cm^2
- 10. about 236.625 ft^2
- 13. 23.5 in.^2
- 14. about 21.87 ft^2
- 16. $P = \text{about } 94.2 \text{ ft}$
 $A = \text{about } 628 \text{ ft}^2$
- 18. $x - 12$
- 19. $y \div 6$
- 20. $b + 3$
- 21. $7w$
- 22. A

Review Hmwk Pt. 1 (Notes Practice Problems)

Review Hmwk Pt. 2 (Notes Practice Problems)

pp. 359-361 (#6-8, 11-13, 15-16, 19, 29-32)

6.



32 in.²

7. 324 m²

8. 166 mm²

11. 136 m²

12. 382.5 in.²

13. 294 yd²

15. $2\frac{2}{3}$ ft²

16. The area of the 3×5 face is used 4 times rather than just twice.

$$\begin{aligned} S &= 2(3)(5) + 2(3)(4) + 2(5)(4) \\ &= 30 + 24 + 40 \\ &= 94 \text{ in.}^2 \end{aligned}$$

19. yes; Because you do not need to frost the bottom of the cake, you only need 249 square inches of frosting.

29. 160 ft²

30. 54 m²

31. 28 ft²

32. B

pp. 366-367 (#4-5, 7-8, 10-11, 13-14, 21-24)

- 4. 40 in.^2
- 5. 178.3 mm^2
- 7. 144 ft^2
- 8. 64 cm^2
- 10. 322.5 in.^2
- 11. 1240.4 mm^2
- 13. 6 m
- 14. 165 ft^2
- 21. $A \approx 452.16 \text{ units}^2$;
 $C \approx 75.36 \text{ units}$
- 22. $A \approx 200.96 \text{ units}^2$;
 $C \approx 50.24 \text{ units}$
- 23. $A \approx 572.265 \text{ units}^2$;
 $C \approx 84.78 \text{ units}$
- 24. B

pp. 372-373 (#6-7, 10-12, 17, 19-22)

6. $28\pi \approx 87.9 \text{ mm}^2$

7. $156\pi \approx 489.8 \text{ ft}^2$

10. $72\pi \approx 226.1 \text{ in.}^2$

11. $28\pi \approx 87.9 \text{ m}^2$

12. The area of only one base is added. The first term should have a factor of 2;

$$\begin{aligned} S &= 2\pi r^2 + 2\pi rh \\ &= 2\pi (5)^2 + 2\pi (5)(10.6) \\ &= 50\pi + 106\pi \\ &= 156\pi \approx 489.8 \text{ yd}^2 \end{aligned}$$

17. See *Taking Math Deeper*.

19. 10 ft^2

20. 16 cm^2

21. 47.5 in.^2

22. C

p. 375 (#1-11)

1. 132 cm^2
2. 100 mm^2
3. 245 m^2
4. 28 cm^2
5. $78\pi \approx 244.9 \text{ ft}^2$
6. $110\pi \approx 345.4 \text{ m}^2$
7. $126\pi \approx 395.6 \text{ cm}^2$
8. $97.6\pi \approx 306.5 \text{ mm}^2$
9. **a.** 18 ft^2
b. yes
10. $108\pi \approx 339.12 \text{ in.}^2$
11. $11,520 \text{ in.}^2$

pp. 380-381 (#4-6, 10-14, 16, 25-28)

- 4. 729 in.³
- 5. 288 cm³
- 6. 238 m³
- 10. 172.8 m³
- 11. 645 mm³
- 12. 3320 ft³
- 13. The area of the base is wrong.
$$V = \frac{1}{2}(7)(5) \cdot 10$$
$$= 175 \text{ cm}^3$$
- 14. The gym locker has more storage space because it has a greater volume.
- 16. 1440 in.³
- 25. \$90
- 26. \$144
- 27. \$240.50
- 28. D

pp. 386-387 (#4, 5, 7, 9, 11, 14, 16, 21-24)

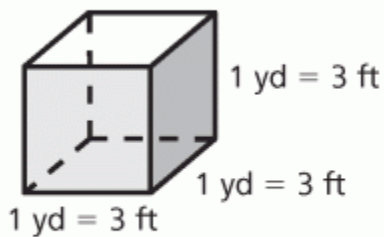
- 4. $1\frac{1}{3} \text{ ft}^3$
- 5. 20 mm^3
- 7. 80 in.^3
- 9. 252 mm^3
- 11. 700 mm^3
- 14. 240 m^3
- 16. Spire B; 4 in.^3
- 21. 153° ; 63°
- 22. 98° ; 8°
- 23. 60° ; none
- 24. C

pp. 388-389 (#1-15)

1. triangle
2. triangle
3. rectangle
4. rectangle
5. triangle
6. rectangle
7. The intersection is the shape of the base.
8. rectangle
9. circle
10. line segment
11. circle
12. circle
13. rectangle
14. circle
15. The intersection occurs at the vertex of the cone.

p. 390 (#1-10)

1. 168 in.^3
2. 360 ft^3
3. 480 yd^3
4. 4925 mm^3
5. 664 ft^3
6. 5 m^3
7. pentagon
8. rectangle
9. $10,666.7 \text{ ft}^3$
10. 27 ft^3



$$3 \times 3 \times 3 = 27 \text{ ft}^3$$

pp. 391-393 (1-2, 4-8, 10-17)

1. 158 in.^2
2. 400 cm^2
4. 16 in.^2
5. 147.6 m^2
6. 241.8 cm^2
7. $54\pi \approx 169.6 \text{ yd}^2$
8. $10.88\pi \approx 34.2 \text{ cm}^2$
10. 96 in.^3
11. 120 m^3
12. 607.5 mm^3
13. 850 ft^3
14. 2100 in.^3
15. 192 mm^3
16. rectangle
17. triangle

p. 394 (1-11)

1. 62 ft^2
2. 5 in.^2
3. 299.8 m^2
4. 62.8 cm^2
5. 1623.4 in.^2
6. 324 in.^3
7. 41.6 yd^3
8. 48 m^3
9. 13 quarts of paint
10. a. doubling the width
b. 216 in.^3
11. 12 cm