

Additional Exercises Answers

3.1 Form I

1. \$18 2. \$720 3. \$2000 4. \$6000 @ 4% and \$9000 @ 6%
5. \$30,000 @ 3% and \$90,000 @ 5% 6. \$3200 7. 24 mL 8. 25.2 mL 9. 12 gallons
10. 2 liters of 20% and 3 liters of 70% 11. 180 miles 12. 5 hrs.

3.1 Form II

1. \$315 2. \$13,823.15 3. \$1200 @ 4% and \$1800 @ 6% 4. \$3300 5. 1.6 liters of 20% and 2.4 liters of 70% 6. 12.5 liters of 18% and 7.5 liters of 10% 7. \$8250 @ 8% and \$4250 @ 4.5% 8. \$20,000 in a cd and \$4000 in a mutual fund 9. \$42,000 @ 12% and \$23,000 @ 7% loss 10. 60 mph and 75 mph 11. 2 1/2 hours 12. 3 1/11 hours

3.1 Form III

1. \$140 2. \$10,500 @ 6.2% and \$6500 @ 4.5% 3. \$50,000 @ 4% and \$20,000 @ 10%
4. \$2200 @ 5.12% and \$1400 @ 4.25% 5. 160 ounces 6. 4 liters 7. 10 liters 8. 250 pounds
9. 736 adult and 174 student tickets 10. 3.6 hours or 3 3/5 hours 11. 2.4 hours or 2 2/5 hours
12. 7 6/7 mph

3.2 Form I

1. $\frac{2}{3}$ 2. $\frac{5}{7}$ 3. $\frac{3}{5}$ 4. $\frac{5}{2}$ 5. $\frac{3}{4}$ 6. {21} 7. {14.4} 8. {39} 9. {4.5} 10. {18}
11. {120} 12. {-16} 13. 15 minutes 14. 300 miles 15. 6 bags 16. 40 passes

3.2 Form II

1. $\frac{13}{2}$ 2. $\frac{11}{16}$ 3. $\frac{5}{12}$ 4. $\frac{7}{3}$ 5. $\frac{3}{1}$ 6. {35} 7. {14} 8. $\left\{\frac{22}{3}\right\}$ 9. {27} 10. {22.5}
11. {7} 12. {12} 13. \$20 14. \$91.25 15. 254.1 ft.² 16. $3\frac{1}{3}$ inches

3.2 Form III

1. $\frac{48}{5}$ 2. $\frac{7}{8}$ 3. $\frac{1}{5}$ 4. $\frac{8}{1}$ 5. $\frac{1}{3}$ 6. {12} 7. {3.6} 8. {2} 9. {1} 10. $\left\{\frac{10}{3}\right\}$
11. {14} 12. {4} 13. \$77.94 14. 36 shrubs 15. 13 people 16. 30 bags

3.3 Form I

- 1a. 22 inches b. 28 in.² 2a. 24 inches b. 24 ft.² 3a. 54 inches b. 216 in.²
4. 64π square centimeters; 113 cm.² 5. 36π square inches; 113 in.² 6. 8π square ft.; 25 feet
7. 20π cm.; 63 cm. 8. 12π cubic inches; 38 in.³ 9. 64π cubic centimeters; 201 cm.³
10. 20π cubic inches; 63 in.³ 11. 105 cubic inches 12. 138° 13. 53°
14. Width 7 feet; length 11 feet 15. 5 inches, 11 inches and 15 inches 16. 55°, 57°, and 68°

3.3 Form II

- 1a. 37 inches b. 78 sq. in. 2a. 40 cm. b. 64 sq. cm. 3. 296 sq. in.
4. 49π square inches; 154 in.^2 5. 20.25π square centimeters; 64 cm.^2 6. 4.8π feet; 15 feet
7. 16π cubic centimeters; 50 cm.^3 8. 4608π cubic inches; 147 in.^3
9. 4.5π cubic decimeters; 14 dm.^3 10. 3 meters 11. 34° and 56°
12. Width 5.5 feet; length 11 feet 13. 240 cubic feet 14. 38° , 59° and 83°
15. 36.2° , 41.2° and 102.6° 16. 17 inches by 92 inches

3.3 Form III

- 1a. 34.08 in. b. 58.752 in.^2 2a. 38.63 cm. b. 63.44 cm^2 3. 331.2 in.^2
4. $331.24\pi \text{ mm}^2$; 1041 mm^2 5. 24.8π inches; 78 inches 6. 8π cubic inches; 25 in.^3
7. 370.301π cubic centimeters 8. $47.916\pi \text{ in.}^3$ 9. 1444 ft.^2 10. 14 meters 11. 8 inches
12. 39.68 ft.^3 13. 65° and 115° 14. 39° and 102° 15. 20.5° , 41° and 118.5°
16. 979 square feet