7.5 Form I

1. $\frac{9}{8}$ 2. $\frac{2}{5}$ 3. $\frac{1}{y}$ 4. $\frac{288}{385}$ 5. $-\frac{28}{3}$ 6. $\frac{217}{132}$ 7. 10 8. $\frac{8+a}{8-a}$ 9. $\frac{36}{x}$ 10. $\frac{y+x}{y-x}$
11. $\frac{2y+x}{2y-2x}$ 12. $\frac{16}{x}$ 13. $3s+7t$ 14. $\frac{x-3}{x+2}$ 15. $\frac{3x+2}{5x}$

7.5 Form II

1. $\frac{x(x+9)}{28}$ 2. $\frac{y(y+9)}{15}$ 3. $\frac{2(y+4)}{9y}$ 4. $\frac{2(y+7)}{3y}$ 5. $\frac{2-5r}{5r}$ 6. $\frac{5y+2x}{7xy-9}$ 7. $\frac{x-3}{x-2}$
8. $\frac{x}{x-2}$ 9. $\frac{3+x}{3-x}$ 10. $\frac{x+3}{x+2}$ 11. $\frac{x}{x^2+1}$ 12. $\frac{3a+8}{3a+10}$ 13. $\frac{5x+1}{5x-1}$ 14. $\frac{2x}{5(x-3)}$
15. $\frac{7+3x^2}{5x^2-2x}$.

7.5 Form III

1. $\frac{x-1}{x+1}$ 2. $\frac{1}{(x-2)(x+5)}$ 3. $\frac{2y-1}{2y+1}$ 4. $\frac{x+2}{x+3}$ 5. $\frac{1}{a^2-a+1}$ 6. $\frac{x+3}{x-2}$ 7. $\frac{x-5}{x+5}$
8. $-\frac{1}{3}$ 9. $\frac{y}{x}$ 10. x^2+1 11. –2 12. $\frac{x-2}{x+8}$ 13. $\frac{k-6}{3}$ 14. $\frac{2-9r}{9r}$
15. $\frac{4x^2+3x-6}{7x^2-2x+6}$.

7.6 Form I

1. {144} 2. {6} 3. $\left\{-\frac{7}{6}\right\}$ 4. {1} 5. $\left\{\frac{29}{2}\right\}$ 6. {–6} 7. {–4, –1} 8. {10} 9. {3}
10. {3} 11. {1} 12. {5} 13. {16} 14. {20} 15. {–48}

7.6 Form II

1. $\left\{\frac{2}{9}\right\}$ 2. Ø 3. $\left\{\frac{3}{13}\right\}$ 4. {–6} 5. $\left\{\frac{1}{2}, -3\right\}$ 6. {–4} 7. {–10, 9} 8. $\left\{\frac{5}{3}, -\frac{1}{2}\right\}$
9. $\left\{\frac{1}{2}\right\}$ 10. {16} 11. {–88} 12. {–1, 49} 13. $\left\{\frac{1}{2}\right\}$ 14. {–8} 15. {–7}

7.6 Form III

1. {–2} 2. Ø 3. {2} 4. {7} 5. Ø 6. {2} 7. $\left\{\frac{3}{5}, -\frac{1}{2}\right\}$ 8. $\left\{-\frac{5}{6}\right\}$ 9. {–5} 10. {10}
11. {3} 12. {1} 13. {4, 6} 14. {3} 15. Ø

7.7 Form I

1. 5 mph 2. 6 mph 3. \$84.38 4. $\frac{14}{5}$ minutes 5. \$1980 6. 144 trout 7. 28 in. 8. 25 ft
9. 18 10. 24 m

7.7 Form II

1. 20 mph 2. $\frac{150}{7}$ km/h 3. 6 minutes 4. $\frac{44}{7}$ minutes 5. \$5500 6. 375 trout 7. 9 yrs
8. 6 ft 9. 28 11.25 in.

7.7 Form III

1. SUV: 30 km/h; sports car: 70 km/h 2. $\frac{55}{19}$ mph 3. $\frac{12}{5}$ hr.
4. Baker: 15 minutes; assistant: 60 minutes 5. \$5625 6. 119 trout 7. 7.9 in. 8. 10 ft
9. 9 10. $\frac{13}{5}$ feet

7.8 Form I

1. 3 2. 45 3. 9 4. 375 5. $x = 6$ 6. $x = 36$ 7. $f = 32$ 8. $f = -24$ 9. $q = 3$ 10. $h = 6$
11. 3 gallons 12. 240 milliamperes 13. 60 gallons 14. 88.2 meters
15. 84 pounds per square inch 16. 5 feet per second 17. 60 milliamperes 18. 2.8 quarts
19. \$736.00 20. 96 watts

7.8 Form II

1. 11 2. 54 3. 148 4. 4 5. $x = 20$ 6. $x = 45$ 7. $f = 24$ 8. $f = -\frac{56}{9}$
9. $q = 8$ 10. $h = 7$ 11. 7.7 gallons 12. 220 milliamperes 13. 91 gallons 14. 161.6 meters
15. 120 pounds per square inch 16. 7 feet per second 17. 60 milliamperes 18. 3.2 quarts
19. \$395.20 20. 125 watts

7.8 Form III

1. $y = 192$ 2. $y = 324$ 3. $s = 225$ 4. $m = 270$ 5. $x = 15$ 6. $x = 96$ 7. $f = 1323$
8. $f = -800$ 9. $q = 6$ 10. $h = 4$ 11. 5.6 gallons 12. 350 milliamperes 13. 79.75 gallons
14. 255 meters 15. 132 pound per square inch 16. 8.4 feet per second 17. 50 milliamperes
18. 3.6 quarts 19. \$472.50 20. 108 watts