

Unit R3.1

1. a) $5 \div 9$ b) $12 \div 45$ c) $67 \div 90$ 2. a) $\frac{12}{45}$ b) $\frac{23}{45}$ c) $\frac{56}{145}$
3. a) $\frac{6}{10}$ b) $\frac{12}{25}$ 4. a) $\frac{17}{50}$ b) 0.40 c) $\frac{69}{200}$ d) 0.125
- e) $\frac{1}{20}$ f) 0.2 5. 0.25 6. a) $4\frac{3}{5}$ b) $5\frac{5}{8}$ c) $8\frac{10}{11}$
7. a) $\frac{15}{4}$ b) $\frac{111}{11}$ c) $\frac{79}{9}$ 8. $\frac{21}{5}$ hr 9. a) 2.6 b) 9.5
- c) 8.7 d) 4.5 e) 6.6 f) 7.12 10. b
11. 3.0, 1.5, 6.0 12. parallelogram 13. circle 14. cone
15. 0.3, 0.4, 0.5, 0.6, 0.7 16. $\frac{12}{30}$

Unit R3.2

17. a) 1 b) $\frac{3}{7}$ c) $\frac{1}{2}$ d) $\frac{3}{5}$ e) $\frac{1}{2}$ f) $\frac{2}{3}$
18. $\frac{3}{13}$ 19. a) 72 b) 150 c) 24 20. 200
21. a) $\frac{7}{15}$ b) $\frac{4}{5}$ c) $\frac{5}{16}$ d) $\frac{7}{8}$ e) $\frac{1}{14}$ f) $\frac{2}{3}$
22. $\frac{1}{30}$ 23. a) $5\frac{1}{30}$ b) $1\frac{1}{12}$ c) $80\frac{27}{32}$ 24. \$20
25. a) $95\frac{27}{35}$ b) $13\frac{13}{36}$ c) $4\frac{9}{140}$ 26. $12\frac{3}{12}$
27. a) $4\frac{2}{5}$ b) $3\frac{1}{16}$ c) $34\frac{19}{45}$ 28. $15\frac{1}{10}$ 29. $40\frac{9}{20}$

Unit R3.3

30. a) $4\frac{1}{2}$ b) $5\frac{1}{3}$ c) $17\frac{1}{3}$ d) 32 31. \$52 32. a) 17
- b) 39 c) $7\frac{1}{5}$ 33. a) 6 b) 6 c) 390 34. 57
35. a) $\frac{6}{35}$ b) $\frac{7}{15}$ c) $\frac{6}{11}$ d) $\frac{7}{150}$ e) $\frac{6}{77}$ f) $\frac{5}{12}$
36. $\frac{9}{16}$ 37. $5\frac{5}{8}$ 38. a) $14\frac{14}{15}$ b) $41\frac{5}{8}$ c) $54\frac{33}{170}$ d) $\frac{17}{30}$
- e) $28\frac{37}{245}$ f) $585\frac{10}{198}$ 39. a) $102\frac{6}{7}$ b) $86\frac{4}{19}$ c) 863
40. $18\frac{2}{3}$ hr 41. a) 14 b) $72\frac{2}{9}$ c) $15\frac{7}{12}$ d) $77\frac{5}{7}$

Unit R3.4

42. $15\frac{3}{4}$

43. a) 49 b) 14 c) $\frac{1}{24}$ d) $\frac{1}{24}$ e) 36 f) 55

44. no

45. a) $1\frac{1}{6}$ b) $\frac{21}{22}$ c) $\frac{13}{15}$ d) $1\frac{1}{44}$ e) $\frac{38}{51}$ f) 1

46. 28 pieces

47. a) $\frac{5}{12}$ b) $\frac{7}{198}$ c) $\frac{8}{39}$ d) $10\frac{35}{76}$ e) $\frac{91}{113}$ f) $\frac{38}{99}$

48. a) $4\frac{2}{3}$ b) $2\frac{3}{4}$ c) $\frac{4}{7}$ d) $\frac{16}{27}$

49. d

50. a) $\frac{6}{11}, \frac{7}{11}, \frac{8}{11}, \frac{9}{11}$; pattern adding $\frac{1}{11}$

b) $7\frac{1}{2}, 10, 12\frac{1}{2}, 15$; pattern adding $2\frac{1}{2}$

c) $\frac{1}{16}, \frac{1}{32}, \frac{1}{64}, \frac{1}{256}$; pattern multiplying by $\frac{1}{2}$

51. a) 25, 27.5, 30

b) 0.60, 0.75, 0.90

52. 32 cubes