15. (a) 17 + *m* years
    (b) 37 years
16. (a) (20 + 2x) cm
    (b) 32 cm
17. $\frac{16}{19}$
18. $72.50
19. $1.50
20. 19.5 kg
21. 400 g
22. 120
23. $0.90
24. 120
25. (a) 262.50   (b) $237.50
26. 6
27. 2 : 4 : 3
28. 54 in. [*cm*]
29. (a) $\frac{5}{11}$ (b) $20
30. 5 : 3 : 4
31. (a) 3 : 5   (b) 11 : 5
32. 9 cm²
33. (a) 296 cm²   (b) 68 cm
34. 28 cm

Unit 4 - Percentage

1 Part of a Whole as a Percentage (pp. 47-52)

   60%
1. (a) 26%   (b) 40%
2. (a) 6%   (b) 20%   (c) 6%
   (d) 16%   (e) 9%   (f) 25%
3. (a) 48%   (b) 64%   (c) 40%
   (d) 30%   (e) 40%   (f) 6%
5. 12.5%
6. (a) 25%   (b) 20%   (c) 75%
   (d) 80%   (e) 37.5%   (f) 70%
7. (a) $\frac{1}{20}$ (b) $\frac{2}{25}$ (c) $\frac{1}{2}$
   (d) $\frac{3}{20}$ (e) $\frac{11}{25}$ (f) $\frac{39}{50}$
8. 80%
9. 7.5 %
10. (a) 10%   (b) 90%
    (c) 1%   (d) 3%
    (e) 75%   (f) 0.1%
    (g) 4.5%   (h) 22.5%
11. (a) 0.03   (b) 0.35
    (c) 0.4   (d) 0.86
12. (a) 70%   (b) 30%
13. (a) 55%   (b) $54
14. $44
15. 161
16. $618

Practice 4A (p. 53)

1. (a) $\frac{2}{25}$ (b) $\frac{1}{4}$
   (c) $\frac{1}{2}$ (d) $\frac{33}{50}$
2. (a) 0.09   (b) 0.9
   (c) 0.15   (d) 0.62
3. (a) 40%   (b) 87.5%
   (c) 45%   (d) 5%
   (e) 50%   (f) 8%
   (g) 15%   (h) 24.5%
4. 15%
5. 35%
6. 9%
7. 40%
8. 25%
9. 20%
10. 28%

Practice 4B (p. 54)

1. (a) 11.25   (b) 702   (c) $75
   (d) 180 m   (e) 10.5 ℓ   (f) 9.6 kg
2. $60
3. 9
4. 45
5. $190
6. $1470
7. 48
8. 250 g
9. $34
10. 16

2 One Quantity as a Percentage of Another (pp. 55-59)

1. 10%
2. 15%
3. 150%
4. 75%
5. (b) 20%
6. 7.5%
7. 10; 25%
8. $67.20
9. 4.25 kg

Practice 4C (p. 60)

1. 32%
2. 25%
3. (a) 150%   (b) 50%
4. 26%
5. 25%
6. 20%
7. 25%
8. 15%
9. 40%
10. 40%

3 Solving Percentage Problems by Unitary Method (pp. 61-66)

$3,000
1. 56
2. $960
3. $20
4. 150
5. $1320
6. $750; selling price $900
7. $40
8. 200
9. 90
10. 16

Practice 4D (p. 67)

1. $1,200
2. 1,100
3. 45
4. 800
5. $200
6. $60
7. $400
8. 80
9. $50
10. 84

Practice 4E (p. 68)

1. 40%
2. 24
3. $1875
4. $50
5. (a) 5   (b) 12.5%
6. 50%
7. 180
8. 16%
9. $2200
10. (a) 32%   (b) $37.50

Review C (pp. 69-73)

1. (a) $\frac{3}{4}$ (b) $\frac{7}{10}$
2. $\frac{1}{5}$
3. (a) $\frac{3}{8}$ (b) $\frac{7}{8}$
   (c) 7   (d) 2
4. $\frac{3}{5}$
5. $\frac{1}{12}$
6. (a) 0.35   (b) 2.2
7. (a) $\frac{3}{40}$ (b) $1\frac{1}{25}$

8. $\frac{3}{5}$
9. 6.96
10. (a) $\frac{1}{6}$ (b) $\frac{1}{4}$
11. (a) 22   (b) 20
12. 17.93 km
13. 0.89
14. (a) 55,000   (b) 4   (c) 4.1
15. 62.5%
16. 23.5%
17. (a) $\frac{4}{5}$ (b) $\frac{1}{20}$
18. (a) 0.06   (b) 0.92
19. (a) 1.5 kg   (b) 210 m
20. 25%
21. 35
22. 64
23. 3900
24. $5.70
25. 25
26. $5.20
27. 300
28. 21 kg
29. $68.40
30. $1400
31. 26
32. $91.80
33. 700 ml
34. 50
35. $\frac{3}{16}$
36. 60 ℓ
37. 3 : 5 : 4
38. $\frac{9}{17}$
39. $9
40. 102
41. 144
42. $3.60
43. 25%
44. $1250
45. 16%
46. 13 cm^2
47. 60 cm^2
48. C
49. (a) 16   (b) 40%   (c) 30%

Unit 5 - Speed

1 Speed and Average Speed (pp. 74-80)

225
1. 50 km/h   65 km/h   35 km/h
   90 mi/h [km/h]
   45 mi/h [km/h]
   70 mi/h [km/h]