

**PART ONE** *Mathematics Fundamentals and Business Applications*

**Chapter 1** Review of Arithmetic

**Exercise 1.1**

- A. 1. 14
- 2. 9
- 3. 53
- 4. 23
- 5. 24
- 6. 0.2
- 7. 1
- 8. 4
- 9. 539.73
- 10. 0.17
- 11. 8300
- 12. 0.57

**Exercise 1.2**

- A. 1.  $\frac{2}{3}$
- 2.  $\frac{1}{2}$
- 3.  $\frac{7}{12}$
- 4.  $\frac{8}{5}$
- 5.  $\frac{2}{5}$
- 6.  $\frac{5}{73}$
- 7.  $\frac{5}{1}$
- 8.  $\frac{5}{3}$

Answer Key for *Contemporary Business Mathematics with Canadian Applications*, Eleventh Edition

B. 1. 1.375

2. 1.75

3.  $1.\dot{6}$

4.  $0.8\dot{3}$

5.  $1.8\dot{3}$

6.  $0.\dot{7}$

7.  $1.08\dot{3}$

8.  $1.2\dot{6}$

C. 1. 3.375

2. 3.4

3.  $8.\dot{3}$

4.  $16.\dot{6}$

5.  $33.\dot{3}$

6.  $83.\dot{3}$

7.  $7.\dot{7}$

8.  $7.08\dot{3}$

D. 1. \$5.63

2. \$17.45

3. \$18.00

4. \$253.49

5. \$57.70

6. \$3.09

7. \$13.00

8. \$40.00

E. 1. 29 000

2. 897 000

3. 0.586

4. 0.49136

5. 31 500

6. \$730

7. 0.15
8. \$630.70
9. \$423
10. \$220 364.90
11. \$2250
12. \$34 426.47
13. \$1734.83
14. \$292.87

**Exercise 1.3**

- A.
1. 0.64
  2. 3
  3. 0.025
  4. 0.001
  5. 0.005
  6. 0.85
  7. 2.5
  8. 0.048
  9. 0.075
  10. 0.009
  11. 0.0625
  12. 0.99
  13. 2.25
  14. 0.0005
  15. 0.0825
  16. 0.005
  17. 1.125
  18. 0.09375
  19. 0.0075
  20. 1.625
  21. 0.004
  22. 0.0025

23. 0.00025

24. 1.375

25. 0.00625

26. 0.00875

27. 0.0225

28.  $0.1\dot{6}$

29.  $1.1\dot{6}$

30.  $1.8\dot{3}$

31.  $0.8\dot{3}$

32.  $0.\dot{6}$

B. 1.  $\frac{1}{4}$

2.  $\frac{5}{8}$

3.  $\frac{7}{4}$

4.  $\frac{1}{20}$

5.  $\frac{3}{8}$

6.  $\frac{3}{4}$

7.  $\frac{1}{25}$

8.  $\frac{2}{25}$

9.  $\frac{2}{5}$

10.  $\frac{7}{8}$

11.  $\frac{5}{2}$

12.  $\frac{1}{50}$

13.  $\frac{1}{8}$

14.  $\frac{3}{5}$

15.  $\frac{9}{400}$

16.  $\frac{1}{200}$

17.  $\frac{1}{800}$

18.  $\frac{1}{3}$

19.  $\frac{3}{400}$

20.  $\frac{2}{3}$

21.  $\frac{1}{16}$

22.  $\frac{1}{400}$

23.  $\frac{1}{6}$

24.  $\frac{3}{40}$

25.  $\frac{3}{400}$

26.  $\frac{7}{800}$

27.  $\frac{1}{1000}$

28.  $\frac{3}{500}$

29.  $\frac{1}{40}$

30.  $\frac{4}{3}$

31.  $\frac{11}{6}$

32.  $\frac{5}{3}$

- C. 1. 350%  
2. 7.5%  
3. 0.5%  
4. 37.5%  
5. 2.5%  
6. 200%  
7. 12.5%  
8. 0.1%  
9. 22.5%  
10. 0.8%  
11. 145%  
12. 2.25%  
13. 0.25%  
14. 99.5%  
15. 9%  
16. 300%  
17. 75%  
18. 12%  
19. 166.6%  
20. 3.5%  
21. 4.5%  
22. 62.5%  
23. 0.75%  
24. 83.3%

25. 1.125%
26. 116.6%
27. 37.5%
28. 27.5%
29. 133.3%
30. 2.25%
31. 65%
32. 80%

**Exercise 1.4**

A. 1. \$14 970.88

2. \$2362.56

3. \$1147.50

4. \$1406.25

5. \$ 48.00

45.00

27.00

56.00

\$176.00

6. \$ 84.00

55.00

252.00

400.00

\$791.00

B. 1. 68¢

2. (a) 61

(b) \$1.029

(c) \$0.118

3. 2.9

4. \$7275

- 5. (a) \$10.45
- (b) 115.899
- (c) \$10.35
- (d) \$1379.20

**Exercise 1.5**

- A. 1. (a) \$1326
- (b) \$17
- (c) \$1606.50
- 2. (a) \$1687.50
- (b) \$22.50
- (c) \$1957.50
- 3. (a) \$13.26
- (b) \$2165.25
- 4. (a) \$11.25
- (b) 8.5
- 5. \$14.32
- 6. (a) \$31.14
- (b) \$1655.94
- 7. \$501.56
- 8. \$1568.06
- 9. \$1421.60
- 10. (a) \$825.00
- (b) \$932.25
- 11. (a) \$400
- (b) \$573.95
- 12. 5.25%
- 13. 7.5%
- 14. \$19 680
- 15. \$6782.86
- 16. \$721.35



**Exercise 1.6**

1. Cook's owes the government \$27 728.50.
2. \$950.00
3. \$39.00
4. \$16.50
5. \$2.50
6. \$ 50.00
7. \$19.73  
\$59.19  
\$56.371429  
\$2.82
8. \$2843.88
9. \$4357.80
10. 14.497857
11. (a) \$5 480 000  
(b) 21.92  
(c) \$3836.00

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1. \$442 173.91
2. \$27 000 000
3. \$48 750

**Review Exercise**

1. (a) 29  
(b) -8  
(c) 11  
(d) 8  
(e) \$1520.83  
(f) 0.15  
(g) 339.73

- (h) 950.68
  - (i) 625.45
  - (j) 1250
- 2.
- (a) 1.85
  - (b) 0.075
  - (c) 0.004
  - (d) 0.00025
  - (e) 0.0125
  - (f) 0.0075
  - (g) 1.625
  - (h) 0.1175
  - (i)  $0.08\dot{3}$
  - (j)  $0.8\dot{3}$
  - (k)  $2.\dot{6}$
  - (l) 0.10375
- 3.
- (a)  $\frac{1}{2}$
  - (b)  $\frac{3}{8}$
  - (c)  $\frac{1}{6}$
  - (d)  $\frac{5}{3}$
  - (e)  $\frac{1}{200}$
  - (f)  $\frac{3}{40}$
  - (g)  $\frac{3}{400}$
  - (h)  $\frac{1}{160}$
- 4.
- (a) 225%
  - (b) 2%

- (c) 0.9%
  - (d) 12.75%
  - (e) 125%
  - (f) 137.5%
  - (g) 2.5%
  - (h) 28%
5. (a) 210  
(b) 7.2  
(c) 195  
(d) 3.6
  6. (a) 20.2083 kg  
(b) \$24.25  
(c) 5.05 kg  
(d) \$6.06
  7. \$ 35.00  
\$150.00  
\$147.00  
\$252.00  
\$584.00
  8. (a) \$20.39  
(b) \$17.27
  9. \$13 875
  10. \$13 680
  11. (a) \$2912.00  
(b) \$19.20  
(c) 16.5
  12. (a) \$999.96  
(b) \$12.82  
(c) \$1230.72

13. (a) \$735  
(b) \$17.09
14. (a) \$602.00  
(b) \$36.40
15. (a) \$498.65  
(b) \$14.25
16. 4.25%
17. \$21 750
18. \$11.44
19. (a) \$13.40  
(b) 8.15
20. \$5945.00
21. 52.55
22. \$3052.00
23. \$3817.50
24. \$18.68
25. \$20.91 more
26. (a) 46.71143  
(b) \$1634.90  
(c) 2.050231  
(d) \$71.76

***Self-Test***

1. (a) 4415.87  
(b) 93.21  
(c) 2610.15  
(d) 4623.33  
(e) 5489.46
2. (a) 1.75  
(b) 0.00375
3. (a)  $\frac{1}{40}$   
(b)  $\frac{7}{6}$

4. (a) 112.5%  
(b) 2.25%
5. \$203.00
6. \$7.35
7. \$299 250.00
8. \$7080
9. \$12.00
10. 15.5%
11. \$2382.41
12. \$788.50
13. \$13.80
14. \$887.00
15. \$7254.60
16. \$19.10
17. \$45 500.00
18. \$650

***Challenge Problems***

1. \$238.206  
\$583.194  
\$520.708929  
\$26.04  
\$36.45  
\$15.58  
\$52.03
2. 92.5%

***Case Study***

1. \$3120.00
2. (a) \$11 966.50  
(b) \$11 966.50  
(c) \$0.00
3. Refund Claimed is \$5350.80