

## Exercise 1-16

1 Round each of these to one decimal place:

- |         |         |           |         |
|---------|---------|-----------|---------|
| a 67.73 | b 5.085 | c 13.7619 | d 8.15  |
| e 0.36  | f 1.007 | g 164.05  | h 84.91 |
| i 33.95 | j 0.99  | k 8.1932  | l 29.97 |

← Example 44

2 Round each of these to two decimal places:

- |            |          |         |             |
|------------|----------|---------|-------------|
| a 15.6701  | b 31.156 | c 0.935 | d 18.178 02 |
| e 199.9974 | f 30.995 | g 0.994 | h 0.9981    |

← Example 45

3 Round each of these to the nearest whole number (0 decimal places).

- |        |          |          |          |
|--------|----------|----------|----------|
| a 84.3 | b 16.728 | c 0.7614 | d 0.053  |
| e 0.99 | f 2.43   | g 18.5   | h 13.207 |

4 You can approximate numbers by rounding decimal places using a spreadsheet. Use this link to see how.

← Spreadsheet  
1-05

5 Round to the number of decimal places indicated in the brackets each time.

- |              |               |               |
|--------------|---------------|---------------|
| a 39.056 (2) | b 100.534 (1) | c 7.3777 (3)  |
| d 0.0051 (1) | e 0.0515 (2)  | f 15.086 (0)  |
| g 245.67 (0) | h 2.198 (1)   | i 42.9995 (3) |

← Rounding  
decimal places

← Example 46

6 Use your calculator to evaluate each of the following. Give your answer to the number of decimal places indicated in the brackets each time.

- |  |   |
|--|---|
| a $14.5 \div 4.2 + 9.75$ (1)             | b $(9.74 - 3.456) \div 5.1$ (4)         |
| c $6.78 \times 4.32 + 8.96 \div 2.4$ (2) | d $\frac{45 - 37}{97 + 24}$ (3)         |
| e $24.31 \div 6.2$ (4)                   | f $5.73 \times 2.8 + 19.7$ (1)          |
| g $24.37 \div 8.9 + 2.1$ (3)             | h $33 \div (15 + 12)$ (2)               |
| i $\frac{94 + 37}{25 + 18}$ (1)          | j $(6.4)^2 \div 3.7$ (0)                |
| k $19.8 - 42.3 \div 7$ (4)               | l $\frac{64.3}{9.2 + 15 \div 3.1}$ (1)  |
| m $42.5 \div 0.18 \times 5.6$ (3)        | n $(42.3 - 15.7) \div (18.7 + 2.9)$ (2) |

# 2.1

## Decimal places and calculations

Name: \_\_\_\_\_ Class: \_\_\_\_\_

1 Use your calculator to simplify these expressions and round off to the number of decimal places shown in the brackets.

- |   |                    |       |
|---|--------------------|-------|
| <b>a</b> $5.7 \times 3.95$              | (1 decimal place)  | _____ |
| <b>b</b> $32.009 \times 37$             | (2 decimal places) | _____ |
| <b>c</b> $6532.44 \div 148.05$          | (2 decimal places) | _____ |
| <b>d</b> $45.2 \div 86.5$               | (3 decimal places) | _____ |
| <b>e</b> $27.078 \times 804$            | (1 decimal place)  | _____ |
| <b>f</b> $5.578 \div 82.8$              | (4 decimal places) | _____ |
| <b>g</b> $341.94 \times 7.07$           | (2 decimal places) | _____ |
| <b>h</b> $5694.842 \div 253.906$        | (3 decimal places) | _____ |
| <b>i</b> $6254.632 \div 37.21$          | (2 decimal places) | _____ |
| <b>j</b> $1000.2 \times 4.0564$         | (1 decimal place)  | _____ |
| <b>k</b> $1.173 \div 17.13$             | (4 decimal places) | _____ |
| <b>l</b> $31.368 \div 86.65$            | (2 decimal places) | _____ |
| <b>m</b> $1245.3 \times 1.605$          | (1 decimal place)  | _____ |
| <b>n</b> $0.92584 \div 8.925$           | (3 decimal places) | _____ |
| <b>o</b> $50.4 \times 4.05 \times 0.45$ | (2 decimal places) | _____ |
| <b>p</b> $5.6 \times 6.5 \times 0.65$   | (1 decimal place)  | _____ |
| <b>q</b> $17.6 \times 76.1 \times 61.7$ | (2 decimal places) | _____ |
| <b>r</b> $8.15 \div 0.06$               | (4 decimal places) | _____ |
| <b>s</b> $3004.7 \div 1.74$             | (1 decimal place)  | _____ |
| <b>t</b> $0.852 \times 0.61 \div 12.4$  | (3 decimal places) | _____ |

2 Simplify, giving your answer correct to 2 decimal places where necessary.

- |   |       |   |       |
|---|-------|---|-------|
| <b>a</b> $12.8 + 3.3 \times 8.3$                | _____ | <b>b</b> $12.8 \times 3.3 + 8.3$          | _____ |
| <b>c</b> $8.3(12.8 + 3.3)$                      | _____ | <b>d</b> $31.2 - 3 + 3$                   | _____ |
| <b>e</b> $(41 + 8) \div 41.8$                   | _____ | <b>f</b> $42.3 + 3 - 3.2 + 0.68$          | _____ |
| <b>g</b> $21.3 \times 150 - 7.2 \times 210$     | _____ | <b>h</b> $1.2 \div (23 + 33.965)$         | _____ |
| <b>i</b> $0.038 \times 150 \div (-53.85)$       | _____ | <b>j</b> $5.7 \times 7.9 + 17.8 \div 7.1$ | _____ |
| <b>k</b> $1.9 \div 91 \times 9.1$               | _____ | <b>l</b> $(-2.5) \times (-35.8)$          | _____ |
| <b>m</b> $0.15436 + 45 + 23 - 1.073$            | _____ | <b>n</b> $\frac{(2.6 - 21.45)}{2.1}$      | _____ |
| <b>o</b> $\frac{(78.6 + 1.073)}{(85.1 - 7.24)}$ | _____ |   |       |

Total \_\_\_\_\_ correct out of 35