Chapter 8: Decimals 2

Level 1

Exercise 1

Section A–Addition of decimals with 1 decimal place

1. Fill in the missing numbers.

   (a) 14 tenths = _____ one _____ tenths

   (b) 19 tenths = _____ one _____ tenths

   (c) 6 tenths + 7 tenths = _____ tenths = _____ one _____ tenths

   (d) 8 tenths + 3 tenths = _____ tenths = _____ one _____ tenth

2. Add the decimals.

(a) 0.6 + 0.3	(b) 0.2 + 1.4	(c) 3.6 + 2.1
0 . 6 + 0 . 3 _____ _____	0 . 2 + 1 . 4 _____ _____	3 . 6 + 2 . 1 _____ _____

3. Add the decimals.

(a) 0.6 + 0.5 0 . 6 + 0 . 5 _____ _____	(b) 4.1 + 0.9 4 . 1 + 0 . 9 _____ _____	(c) 5.5 + 2.8 5 . 5 + 2 . 8 _____ _____

4. Add the decimals.

(a) 5.6 + 4.7 5 . 6 + 4 . 7 _____ _____	(b) 9.3 + 4.7 9 . 3 + 4 . 7 _____ _____	(c) 9.6 + 1.4 9 . 6 + 1 . 4 _____ _____

5. Add the decimal to the whole number.

(a) 3.2 + 2 3 . 2 + 2 . 0 _____ _____	(b) 4.9 + 6 4 . 9 + 6 . 0 _____ _____	(c) 8.4 + 5 8 . 4 + 5 . 0 _____ _____

Section B–Addition of decimals with 2 decimal places

6. Fill in the missing numbers.

   (a) 12 hundredths = _____ tenth _____ hundredths

   (b) 19 hundredths = _____ tenth _____ hundredths

   (c) 2 hundredths + 9 hundredths

   = _____ hundredths

   = _____ tenth _____ hundredths

   (d) 8 hundredths + 8 hundredths

   = _____ hundredths

   = _____ tenth _____ hundredths

7. Add the decimals.

(a) 0.04 + 2.06	(b) 2.19 + 0.77	(c) 3.55 + 2.18
0 . 0 4 + 2 . 0 6 _____ _____	2 . 1 9 + 0 . 7 7 _____ _____	3 . 5 5 + 2 . 1 8 _____ _____

8. Add the decimals.

(a) 8.45 + 0.87	(b) 2.07 + 3.94	(c) 6.33 + 1.67
8 . 4 5 + 0 . 8 7 _____ _____	2 . 0 7 + 3 . 9 4 _____ _____	6 . 3 3 + 1 . 6 7 _____ _____

9. Add the decimals.

(a) 5.85 + 5.15	(b) 9.15 + 4.95	(c) 7.48 + 6.53
5 . 8 5 + 5 . 1 5	9 . 1 5 + 4 . 9 5	7 . 4 8 + 6 . 5 3

10. Add the decimal to the whole number.

(a) 3.25 + 6	(b) 1 + 9.08	(c) 7.75 + 5
3 . 2 5 + 6 . 0 0	1 . 0 0 + 9 . 0 8	7 . 7 5 + 5 . 0 0

Exercise 2

Section A–Subtraction of decimals with 1 decimal place

1. Fill in the missing numbers.

   (a) 1 = _____ tenths

   (b) 3.1 = 2 ones _____ tenths

   (c) 4.5 = 3 ones _____ tenths

   (d) 6.2 = 5 ones _____ tenths

2. Subtract the decimals.

(a) 0.8 – 0.2	(b) 4.7 – 2.6	(c) 7.9 – 1.5
0 . 8 – 0 . 2	4 . 7 – 2 . 6	7 . 9 – 1 . 5

3. Subtract the decimals.

(a) 1.4 – 0.9	(b) 4.5 – 3.6	(c) 7.2 – 2.5
1 . 4 – 0 . 9	4 . 5 – 3 . 6	7 . 2 – 2 . 5

4. Subtract the whole number from the decimal.

(a) 3.4 – 2	(b) 5.9 – 3	(c) 9.5 – 7
3 . 4 – 2 . 0	5 . 9 – 3 . 0	9 . 5 – 7 . 0

5. Subtract the decimal from the whole number.

(a) 3 – 0.7	(b) 9 – 3.1	(c) 13 – 5.5
3 . 0 – 0 . 7	9 . 0 – 3 . 1	1 3 . 0 – 5 . 5

Section B–Subtraction of decimals with 2 decimal places

6. Fill in the missing numbers.

   (a) 4 tenths = 3 tenths _____ hundredths

   (b) 7 tenths = 6 tenths _____ hundredths

   (c) 2 tenths 3 hundredths = 1 tenth _____ hundredths

   (d) 6 tenths 1 hundredth = 5 tenths _____ hundredths

   (e) 0.58 = 4 tenths _____ hundredths

   (f) 0.94 = _____ tenths 14 hundredths

7. Subtract the decimals.

(a) 0.88 – 0.73	(b) 2.52 – 1.12	(c) 6.59 – 4.48
0 . 8 8 – 0 . 7 3 _____ _____	2 . 5 2 – 1 . 1 2 _____ _____	6 . 5 9 – 4 . 4 8 _____ _____

8. Subtract the decimals.

(a) 7.05 – 4.16	(b) 9.72 – 6.74	(c) 25.32 – 5.39
7 . 0 5 – 4 . 1 6 _____ _____	9 . 7 2 – 6 . 7 4 _____ _____	2 5 . 3 2 – 5 . 3 9 _____ _____

9. Subtract the decimals.

(a) 2.6 – 0.25	(b) 4.3 – 1.57	(c) 10.1 – 5.55
2 . 6 0 – 0 . 2 5	4 . 3 0 – 1 . 5 7	1 0 . 1 0 – 5 . 5 5

10. Subtract the decimal from the whole number.

(a) 1 – 0.09	(b) 7 – 0.85	(c) 10 – 4.65
1 . 0 0 – 0 . 0 9	7 . 0 0 – 0 . 8 5	1 0 . 0 0 – 4 . 6 5

Level 2

Exercise 1

1. Multiply the decimal with the whole number.

(a) 5.4×6	(b) 0.16×4	(c) 0.75×5
5 . 4 × 6	0 . 1 6 × 4	0 . 7 5 × 5

(d) 1.09×8 $\begin{array}{r} 1.09 \\ \times \quad 8 \\ \hline \\ \hline \end{array}$	(e) 8.87×9 $\begin{array}{r} 8.87 \\ \times \quad 9 \\ \hline \\ \hline \end{array}$	(f) 26.72×4 $\begin{array}{r} 26.72 \\ \times \quad 4 \\ \hline \\ \hline \end{array}$

2. Divide the decimal by the whole number.

(a) $0.8 \div 2$ $2\overline{)0.8}$	(b) $2.8 \div 7$ $7\overline{)2.8}$	(c) $0.96 \div 3$ $3\overline{)0.96}$
(d) $2.35 \div 5$ $5\overline{)2.35}$	(e) $9.66 \div 6$ $6\overline{)9.66}$	(f) $9.59 \div 7$ $7\overline{)9.59}$

3. Divide the decimal by the whole number.

(a) $0.9 \div 5$ $5\overline{)0.9}$	(b) $6.3 \div 6$ $6\overline{)6.3}$	(c) $6.2 \div 5$ $5\overline{)6.2}$
(d) $6.8 \div 8$ $8\overline{)6.8}$	(e) $81.9 \div 6$ $6\overline{)81.9}$	(f) $175.5 \div 6$ $6\overline{)175.5}$

4. Divide.

(a) $9 \div 6$ $6\overline{)9}$	(b) $2 \div 8$ $8\overline{)2}$	(c) $94 \div 8$ $8\overline{)94}$

5. Divide. Give your answer correct to 1 decimal place.

(a) $0.9 \div 4$	(b) $30.4 \div 5$	(c) $4.6 \div 3$
$4\overline{)0.9}$	$5\overline{)30.4}$	$3\overline{)4.6}$

6. Divide. Give your answer correct to 2 decimal places.

(a) $10.2 \div 7$	(b) $7.83 \div 2$	(c) $28 \div 3$
$7\overline{)10.2}$	$2\overline{)7.83}$	$3\overline{)28}$

7. Estimate the sums by first rounding the numbers to the nearest whole number.

(a) $2.87 + 3.4 \approx$ _____ + _____

= _____

(b) $1.7 + 6.82 \approx$ _____ + _____

= _____

(c) $34.5 + 9.37 \approx$ _____ + _____

= _____

8. Estimate the differences by first rounding the numbers to the nearest whole number.

(a) $5.45 - 2.93 \approx$ _____ + _____

= _____

(b) $6.08 - 1.76 \approx$ _____ – _____

= _____

(c) $19.28 - 10.8 \approx$ _____ – _____

= _____

9. Estimate the products by first rounding the numbers to the nearest whole number.

(a) $0.74 \times 6 \approx$ _____ × _____

= _____

(b) $7.4 \times 4 \approx$ _____ × _____

= _____

(c) $8.53 \times 7 \approx$ _____ × _____

= _____

10. Estimate the quotient.

(a) $17.5 \div 3 \approx$ _____ ÷ _____

= _____

(b) $33.61 \div 7 \approx$ _____ ÷ _____

= _____

(c) $65.22 \div 8 \approx$ _____ ÷ _____

= _____

Exercise 2

Choose the correct answer and write its number in the brackets provided.

1. Estimate the value of 31.15 – 7.56 by rounding the numbers to the nearest tenth.
   (1) 23.5 (2) 23.6
   (3) 23.7 (4) 38.8 ( )

2. Estimate the value of $7.95 + $4.38 by rounding the amounts to the nearest dollar.
   (1) $3 (2) $11
   (3) $12 (4) $13 ( )

3. Find the quotient of 18 ÷ 8 correct to the nearest tenth.
   (1) 22.5 (2) 2.3
   (3) 2.2 (4) 0.2 ( )

4. 2.05 × 9 = _____
   (1) 1.845 (2) 18.45
   (3) 184.5 (4) 1845 ( )

5. Find the value of 6 ÷ 7 correct to 2 decimal places
   (1) 1.17 (2) 1.16
   (3) 0.86 (4) 0.85 ( )

6. 5.2 = 2 ones _____ tenths
   (1) 12 (2) 2
   (3) 22 (4) 32 ( )

7. 0.79 = 3 tenths _____ hundredths
   (1) 49 (2) 39
   (3) 19 (4) 9 ( )

8. Which of the following gives a value that is greater than 4?
   (1) 15.5 – 11.51 (2) 1.29 × 3
   (3) 15 ÷ 4 (4) 0.58 × 7 ( )

9. Which of the following gives the greatest value?
   (1) 3.67 × 2 (2) 23 ÷ 3
   (3) 0.72 × 9 (4) 54 ÷ 8 ( )

10. Which of the following gives the smallest value?
    (1) 1.58 × 6 (2) 85 ÷ 9
    (3) 15.72 – 6.3 (4) 38 ÷ 4 ( )

Level 3

Exercise 1

1. Janet cuts a string 1.38 m long into 3 equal pieces. Find the length of each piece of string. Express your answer in centimetres.

2. 4 notebooks cost $5.40. Find the cost of 1 notebook.

3. Eileen is 1.29 m tall. She is 0.12 m taller than Lynn. How tall is Lynn?

4. Debbie's mass was 36.2 kg three years ago. Now her mass is 33.8 kg. How much lighter is she now?

5. Siti's family drinks 1.5 *l* of milk a day. How many litres of milk does her family drink in a week?

6. Mr Hassan sold 9 books at $4.15 each. How much money did he collect altogether?

7. A toy robot costs $46. The toy robot costs 8 times as much as a doll. How much is the doll?

8. A pizza costs $9.80. 4 girls share the cost of the pizza equally. How much does each girl pay for her share?

9. 2 identical packs of fruit juice cost $7.30. Find the cost of 5 packs of fruit juice.

10. Milly saved $18.75. Sally saved twice as much as Milly. How much did the two girls save altogether?

Exercise 2

1. May and Jamie bought a small cake and a packet of milk, which cost $8.70 and $3.40 respectively. They shared the cost equally. How much did each girl pay?

2. Sumin has a ribbon that is 50 cm long. She cuts 12 cm of it and gives it to her friend. Then she cuts the rest of the ribbon into 8 equal pieces. Find the length of each piece. Give your answer correct to 1 decimal place.

3. Mr Chin spent $17.50 at a bookshop. He spent twice as much as his daughter. How much did they spend altogether?

4. The total mass of 7 pieces of butter and a packet of flour is 3.2 kg. If the mass of a piece of butter is 0.35 kg, find the mass of the packet of flour.

5. Mr Chen bought 4 tins of paint. Each tin of paint cost $23.99. He gave the cashier $100. How much change did he receive?

6. Ashley paid $42.60 altogether for a comic book and a magazine. The comic book cost thrice as much as the magazine. Find the cost of the comic book.

7. Lee Lee has $5.20. She has twice as much money as Serene. Serene has 4 times as much money as Priscilla. Find the amount of money that Priscilla has.

8. Jill has twenty-two 20¢ and 50¢ coins. The total amount of money that she has is $8.30. How many 20¢ coins does she have?

9. Shah wants to buy 8 pizzas at a cost of $19.45 each. What is the least number of $10 notes that he needs to buy the pizzas?

10. Jack has some 10¢ and 5¢ coins. The total amount of money that he has is $1.70. He has 8 more 10¢ coins than 5¢ coins. How many coins does he have altogether?