

Decimals - Worksheet

Skill

Group A - Addition and subtraction of decimals

Work out:

1) $3.7 + 4.6$

2) $0.8 + 5.7$

3) $11.24 + 8.91$

4) $6.7 - 4.3$

5) $7.2 - 5.6$

6) $8.36 - 2.84$

7) $2.3 + 4.87$

8) $5.21 + 2.974$

9) $9.495 + 8.24$

10) $3.4 - 0.57$

11) $12.54 - 9.537$

12) $3.67 - 5.295$

Group B - Multiplication and division of decimals

Work out:

1) 2.3×7

2) 4.9×6

3) 8×1.72

4) $9.2 \div 2$

5) $1.95 \div 5$

6) $0.342 \div 6$

7) 3.8×2.9

8) 6.3×12.1

9) 0.34×25.6

10) $4.5 \div 0.3$

11) $1.62 \div 0.6$

12) $8.502 \div 0.13$

Group C - Mixed decimal arithmetic

Work out:

1) $3.6 + 2.7 - 1.25$

2) $5.67 + 1.9 - 7.01$

3) $8.2 - 4.31 - 2.7$

4) $3 \times 6.4 \times 2.1$

5) $7.3 \times 8 \times 4.9$

6) $0.2 \times 5.4 \div 0.3$

7) $7 \times 3.4 - 12.6$

8) $5 \times 2.9 + 3.1$

9) $4.3 \times 3.7 - 7.12$

10) $7.38 \div 2 + 2.19$

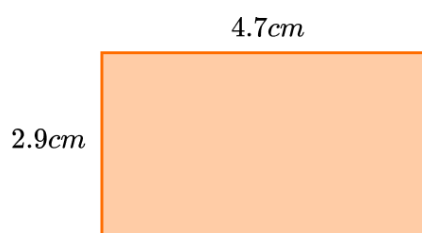
11) $0.513 \div 9 - 0.041$

12) $3.62 \div 0.5 + 1.4$

Decimals - Worksheet

Applied

- 1) The figure shows a rectangle with length 4.7cm and width 2.9cm .



- (a) Find the perimeter of the rectangle.
- (b) Find the area of the rectangle.
- 2) (a) The formula for average speed = total distance \div total time.
Find the average speed of a car, in km/h, that has travelled 78.4 kilometres in 1.4 hours.
- (b) Find the distance travelled by a car, in km, that had an average speed of 48.5 km/h for a total time of 3.5 hours.
- 3) (a) The price of a tub of olives from the delicatessen is calculated by mass.
If the olives cost £5.86 per kilogram. Find the price of a 0.35 kilogram tub of olives.
- (b) A tub of pasta salad had a mass of 0.2 kilograms and came to a price of £2.87.
Find the cost of the pasta salad per kilogram.
- 4) (a) A shopping list consisted of the following items:
Chocolate bar £0.65 Shower gel £0.88
Milk £1.24 Bread £1.10
Pizza £3.85
- Find the total cost.
- (b) Find the change for the shopping from a ten pound note.

Decimals - Exam Questions

- 1) Use $156 \times 249 = 38844$ to work out the following:
- (a) 15.6×2.49 (1)
- (b) 0.156×24.9 (1)
- (c) $388.44 \div 2.49$ (1)
- (3 marks)**

- 2) (a) If $F = ma$. Find F , when $m = 4.8$ and $a = 1.75$ (2)
- (b) If $D = \frac{t}{2} - g$. Find D , when $t = 6.5$ and $g = 1.428$ (2)
- (4 marks)**

- 3) Below is the breakfast menu for a hotel. **(3 marks)**

<u>BREAKFAST</u>	
Continental Breakfast	£4.75
Cooked Breakfast	£9.85
Vegetarian Breakfast	£6.75
Tea for one	£1.20
Coffee for one	£1.59

The Smith family ordered one cooked breakfast, one vegetarian breakfast, three continental breakfasts, three teas and two coffees. Calculate their total bill.

Decimals - Exam Questions

- 4) (a)** A wooden plank is 8.75 metres long. 5 lengths of 1.45 metres are cut from the plank. Find the length of the remaining piece. **(3)**
- (b)** Each wooden plank is £6.74. Dean needs 12 of the planks for a garden decking. He has £80. Does Dean have enough money for the 12 wooden planks? **(3)**
(6 marks)

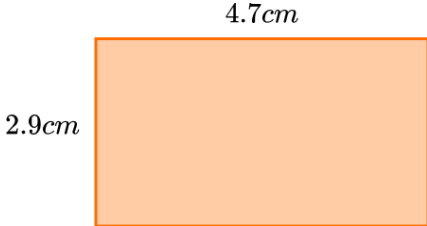
Decimals - Answers

	Question	Answer
	Skill Questions	
Group A	Work out: 1) $3.7 + 4.6$ 2) $0.8 + 5.7$ 3) $11.24 + 8.91$ 4) $6.7 - 4.3$ 5) $7.2 - 5.6$ 6) $8.36 - 2.84$ 7) $2.3 + 4.87$ 8) $5.21 + 2.974$ 9) $9.495 + 8.24$ 10) $3.4 - 0.57$ 11) $12.54 - 9.537$ 12) $3.67 - 5.295$	1) 8.3 2) 6.5 3) 20.15 4) 2.4 5) 1.6 6) 5.52 7) 7.17 8) 8.184 9) 17.735 10) 2.83 11) 3.003 12) - 1.625
Group B	Work out: 1) 2.3×7 2) 4.9×6 3) 8×1.72 4) $9.2 \div 2$ 5) $1.95 \div 5$ 6) $0.342 \div 6$ 7) 3.8×2.9 8) 6.3×12.1 9) 0.34×25.6 10) $4.5 \div 0.3$ 11) $1.62 \div 0.6$ 12) $8.502 \div 0.13$	1) 16.1 2) 29.4 3) 13.76 4) 4.6 5) 0.39 6) 0.057 7) 11.02 8) 76.23 9) 8.704 10) 15 11) 2.7 12) 65.4

Decimals - Answers

Group C	<p>Work out:</p> <p>1) $3.6 + 2.7 - 1.25$ 2) $5.67 + 1.9 - 7.01$ 3) $8.2 - 4.31 - 2.7$ 4) $3 \times 6.4 \times 2.1$ 5) $7.3 \times 8 \times 4.9$ 6) $0.2 \times 5.4 \div 0.3$ 7) $7 \times 3.4 - 12.6$ 8) $5 \times 2.9 + 3.1$ 9) $4.3 \times 3.7 - 7.12$ 10) $7.38 \div 2 + 2.19$ 11) $0.513 \div 9 - 0.041$ 12) $3.62 \div 0.5 + 1.4$</p>	<p>1) 5.05 2) 0.56 3) 1.19 4) 40.32 5) 286.16 6) 3.6 7) 11.2 8) 17.6 9) 8.79 10) 5.88 11) 0.016 12) 8.64</p>
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Decimals - Answers

	Question	Answer
	Applied Questions	
1)	<p>The figure shows a rectangle with length 4.7cm and width 2.9cm.</p>  <p>(a) Find the perimeter of the rectangle.</p> <p>(b) Find the area of the rectangle.</p>	<p>(a) 15.2cm</p> <p>(b) 13.63cm^2</p>
2)	<p>(a) The formula for average speed = total distance \div total time. Find the average speed of a car, in km/h, that has travelled 78.4 kilometres in 1.4 hours.</p> <p>(b) Find the distance travelled by a car, in km, that had an average speed of 48.5 km/h for a total time of 3.5 hours.</p>	<p>(a) 56 km/h</p> <p>(b) 169.75 km</p>
3)	<p>(a) The price of a tub of olives from the delicatessen is calculated by mass. If the olives cost £5.86 per kilogram. Find the price of a 0.35 kilogram tub of olives.</p> <p>(b) A tub of pasta salad had a mass of 0.2 kilograms and came to a price of £2.87. Find the cost of the pasta salad per kilogram.</p>	<p>(a) £2.05 (rounded to 2 d.p.)</p> <p>(b) £14.35</p>

Decimals - Answers

4)	(a) A shopping list consisted of the following items: Chocolate bar £0. 65 Shower gel £0. 88 Milk £1. 24 Bread £1. 10 Pizza £3. 85 Find the total cost.	(a) £7. 72
	(b) Find the change for the shopping from a ten pound note.	(b) £2. 28

Decimals - Mark Scheme

	Question	Answer											
	Exam Questions												
1)	Use $156 \times 249 = 38844$ to work out the following:												
(a)	15.6×2.49	(a) Correct answer of 38.844.	(1)										
(b)	0.156×24.9	(b) Correct answer of 3.8844.	(1)										
(c)	$388.44 \div 2.49$	(c) Correct answer of 156.	(1)										
2) (a)	If $F = ma$. Find F , when $m = 4.8$ and $a = 1.75$.	(a) Method to multiply 4.8 and 1.75. Correct answer of 8.4.	(2)										
(b)	If $D = \frac{t}{2} - g$. Find D , when $t = 6.5$ and $g = 1.428$.	(b) 6.5 divided by 2 or 3.25 seen. Correct answer of 1.822.	(2)										
3)	<p>Below is the breakfast menu for a hotel.</p> <div><p>BREAKFAST</p><table><tr><td>Continental Breakfast</td><td>£4.75</td></tr><tr><td>Cooked Breakfast</td><td>£9.85</td></tr><tr><td>Vegetarian Breakfast</td><td>£6.75</td></tr><tr><td>Tea for one</td><td>£1.20</td></tr><tr><td>Coffee for one</td><td>£1.59</td></tr></table></div> <p>The Smith family ordered one cooked breakfast, one vegetarian breakfast, three continental breakfasts, three teas and two coffees. Calculate their total bill.</p>	Continental Breakfast	£4.75	Cooked Breakfast	£9.85	Vegetarian Breakfast	£6.75	Tea for one	£1.20	Coffee for one	£1.59	<p>Calculating three teas (£3.60) or two coffees (£3.18) or three continentals (£14.25).</p> <p>Method to add cost of items.</p> <p>Correct total of £37.63.</p>	(3)
Continental Breakfast	£4.75												
Cooked Breakfast	£9.85												
Vegetarian Breakfast	£6.75												
Tea for one	£1.20												
Coffee for one	£1.59												

Decimals - Mark Scheme

4) (a)	A wooden plank is 8.75 metres long. 5 lengths of 1.45 metres are cut from the plank. Find the length of the remaining piece.	(a) $5 \times 1.45 (= 7.25)$ $8.75 - "7.25"$ Correct answer of 1.5m.	(3)
(b)	Each wooden plank is £6.74. Dean needs 12 of the planks for a garden decking. He has £80. Does Dean have enough money for the 12 wooden planks?	(b) Method to find 12×6.74 Correct total of £80.88. Answer of "No, he doesn't have enough money".	(3)

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