

Multiplying and Dividing Decimals - Worksheet

Skill

Group A - Multiplying decimals

Work out:

1) 2×3.6

2) 5×7.8

3) 12×8.9

4) 4.12×7

5) 3.84×9

6) 6.35×11

7) 2.4×1.9

8) 3.7×5.2

9) 7.2×10.6

10) 5.67×0.8

11) 7.14×4.9

12) 5.8×3.92

Group B - Dividing decimals

Work out:

1) $5.68 \div 2$

2) $7.14 \div 3$

3) $0.695 \div 5$

4) $62 \div 0.4$

5) $84 \div 0.6$

6) $39 \div 1.2$

7) $6.8 \div 0.8$

8) $14.7 \div 0.3$

9) $1.25 \div 0.4$

10) $1.757 \div 0.07$

11) $6.93 \div 0.12$

12) $7.938 \div 0.14$

Group C - Mixed multiplying and dividing decimals

Work out:

1) $4 \times 3.2 \times 6.4$

2) $2.1 \times 1.8 \times 5$

3) $3.8 \times 2 \times 7.4$

4) $3.46 \div 2 \times 3$

5) $4.11 \div 3 \times 5$

6) $8.68 \div 7 \times 6$

7) $1.32 \times 2 \div 0.6$

8) $0.49 \times 3 \div 0.5$

9) $36.3 \times 4 \div 1.5$

10) $1.5^2 \div 0.3$

11) $3.6^2 \div 0.9$

12) $2.8^2 \div 1.4$

Multiplying and Dividing Decimals - Worksheet

Applied

- 1) (a) Find the total cost of 12 rolls of wallpaper with a price of £4.72 each.

(b) The total cost of 7 identical tins of paint is £85.75. Find the cost of 3 of the tins of paint.
- 2) (a) A rectangle has an area of 8.04 cm^2 . If the width of the rectangle is 1.2 cm , find the length of the rectangle.

(b) A triangle has a base of 3.4 cm and a perpendicular height of 5.1 cm . Find the area of the triangle.
- 3) (a) 1 inch is approximately 2.54 centimetres. What is 3.6 inches in centimetres?

(b) 1 mile is approximately 1.6 kilometres. What is 54 kilometres in miles?
- 4) (a) If $v = u + at$. Find v if $u = 3.2$, $a = 1.8$ and $t = 2.5$.

(b) If $V = IR$. Find R if $V = 6.3$ and $I = 0.15$.

Multiplying and Dividing Decimals - Exam Questions

1) (a) Work out $5.1 \div 0.17$
(2)

(b) Work out $7.776 \div 12$
(2)
(4 marks)

2) You are given that $132 \times 451 = 59532$.
Use this information to work out the
following:

(a) 13.2×451
(1)

(b) 1.32×4.51
(1)

(c) 13.2×0.451
(1)
(3 marks)

Multiplying and Dividing Decimals - Exam Questions

- 3)** A shop sells toilet paper in different size packs.
(4 marks)

A pack of 6 costs £1. 65.

A pack of 9 costs £2. 43.

A pack of 2 costs £0. 60.

Which pack is the best value for money?

- 4) (a)** Find the cost of 12 bottles of sparkling water costing £1. 69 each.
(2)

- (b)** At a cinema, adult tickets cost £7. 75 and child tickets cost £5. 49. Find the total cost of 5 adults and 7 children.
(3)
(5 marks)

Multiplying and Dividing Decimals - Answers

	Question	Answer
Group A	Skill Questions	
	Work out: 1) 2×3.6 2) 5×7.8 3) 12×8.9 4) 4.12×7 5) 3.84×9 6) 6.35×11 7) 2.4×1.9 8) 3.7×5.2 9) 7.2×10.6 10) 5.67×0.8 11) 7.14×4.9 12) 5.8×3.92	1) 7.2 2) 39 3) 106.8 4) 28.84 5) 34.56 6) 69.85 7) 4.56 8) 19.24 9) 76.32 10) 4.536 11) 34.986 12) 22.736
Group B	Work out: 1) $5.68 \div 2$ 2) $7.14 \div 3$ 3) $0.695 \div 5$ 4) $62 \div 0.4$ 5) $84 \div 0.6$ 6) $39 \div 1.2$ 7) $6.8 \div 0.8$ 8) $14.7 \div 0.3$ 9) $1.25 \div 0.4$ 10) $1.757 \div 0.07$ 11) $6.93 \div 0.12$ 12) $7.938 \div 0.14$	1) 2.84 2) 2.38 3) 0.139 4) 155 5) 140 6) 32.5 7) 8.5 8) 49 9) 3.125 10) 25.1 11) 57.75 12) 56.7

Multiplying and Dividing Decimals - Answers

	Question	Answer
Group C	Skill Questions	
	Work out: 1) $4 \times 3.2 \times 6.4$ 2) $2.1 \times 1.8 \times 5$ 3) $3.8 \times 2 \times 7.4$ 4) $3.46 \div 2 \times 3$ 5) $4.11 \div 3 \times 5$ 6) $8.68 \div 7 \times 6$ 7) $1.32 \times 2 \div 0.6$ 8) $0.49 \times 3 \div 0.5$ 9) $36.3 \times 4 \div 1.5$ 10) $1.5^2 \div 0.3$ 11) $3.6^2 \div 0.9$ 12) $2.8^2 \div 1.4$	1) 81.92 2) 18.9 3) 56.24 4) 5.19 5) 6.85 6) 7.44 7) 4.4 8) 2.94 9) 96.8 10) 7.5 11) 14.4 12) 5.6

Multiplying and Dividing Decimals - Answers

	Question	Answer
	Applied Questions	
1)	(a) Find the total cost of 12 rolls of wallpaper with a price of £4.72 each.	(a) £56.64
	(b) The total cost of 7 identical tins of paint is £85.75. Find the cost of 3 of the tins of paint.	(b) £36.75
2)	(a) A rectangle has an area of 8.04 cm^2 . If the width of the rectangle is 1.2 cm , find the length of the rectangle.	(a) 6.7 cm
	(b) A triangle has a base of 3.4 cm and a perpendicular height of 5.1 cm . Find the area of the triangle.	(b) 8.67 cm^2
3)	(a) 1 inch is approximately 2.54 centimetres. What is 3.6 inches in centimetres?	(a) 9.144 cm
	(b) 1 mile is approximately 1.6 kilometres. What is 54 kilometres in miles?	(b) 33.75 miles
4)	(a) If $v = u + at$. Find v if $u = 3.2$, $a = 1.8$ and $t = 2.5$.	(a) 7.7
	(b) If $V = IR$. Find R if $V = 6.3$ and $I = 0.15$	(b) 42

Multiplying and Dividing Decimals - Mark Scheme

	Question	Answer	
	Exam Questions		
1) (a)	Work out $5.1 \div 0.17$.	(a) Method to calculate $510 \div 17$ seen Correct answer of 30	(2)
(b)	Work out $7.776 \div 12$.	(b) Attempt at short or long division Correct answer of 0.648	(2)
2)	You are given that $132 \times 451 = 59532$. Use this information to work out the following:		
(a)	13.2×451	(a) Correct answer of 5953.2	(1)
(b)	1.32×4.51	(b) Correct answer of 5.9532	(1)
(c)	13.2×0.451	(c) Correct answer of 5.9532	(1)

Multiplying and Dividing Decimals - Mark Scheme

3)	A shop sells toilet paper in different size packs. A pack of 6 costs £1. 65. A pack of 9 costs £2. 43. A pack of 2 costs £0. 60. Which pack is the best value for money?	Attempt to find cost of 1 roll or a common multiple of 6, 9 and 2. $1.65 \div 6 = 0.275$ $2.43 \div 9 = 0.27$ $0.60 \div 2 = 0.30$ (1 mark for 2 correct, 2 for marks for all 3 correct) or costs of 18 rolls of £4. 95, £4. 86, £5. 40. (1 mark for 2 correct, 2 marks for all 3 correct) Pack of 9 best value (1)	(4)
4) (a)	Find the cost of 12 bottles of sparkling water costing £1. 69 each.	(a) A method to multiply 12 by 169 Correct answer of £20. 28	(2)
(b)	At a cinema, adult tickets cost £7. 75 and child tickets cost £5. 49. Find the total cost of 5 adults and 7 children.	(b) 5×7.75 or 7×5.49 seen 38. 75 or 38. 43 seen Correct answer of £77. 18	(3)

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