THIRD SPACE
LEARNING

Percentages to decimals - Worksheet

Skill

Group A - Percentages to decimals

Write these percentages as decimals:

1) 30%

2) 35%

3) 35.8%

4) 20%

5) 29%

6) 29.4%

7) 70%

8) 73%

9) 73.6%

10) 90%

11) 99%

12) 99.9%

Group B - Decimals to percentages

Write these decimals as percentages:

1) 0.5

2) 0.58

3) 0.584

4) 0.6

5) 0.61

6) 0.618

7) 0.7

8) 0.72

9) 0.729

10) 0.4

11) 0.45

12) 0.451

Group C - Mixed

Write the equivalent decimal/percentage:

1) 1%

2) 102%

3) 120%

4) 4%

5) 104%

6) 140%

7) 0.07

8) 1.07

9) 1.37

10) 0.08

11) 1.08

12) 1.38

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Percentages to decimals - Worksheet

Applied

1) **(a)** A calculator display shows: $0.34672...$

Write this as a percentage correct to 1 decimal place.

(b) A calculator display shows: $0.82375...$

Write this as a percentage correct to 1 decimal place.

2) **(a)** A calculator display shows: $0.\dot{2}$

Write this as a percentage correct to 1 decimal place.

(b) A calculator display shows: $0.\dot{6}$

Write this as a percentage correct to 1 decimal place.

3) **(a)** A calculator display shows: $0.\dot{5}\dot{8}$

Write this as a percentage correct to 1 decimal place.

(b) A calculator display shows: $0.\dot{9}4\dot{7}$

Write this as a percentage correct to 1 decimal place.

4) **(a)** Fred is calculating a percentage question. He has to work out 35% of £480. He wants to write the percentage as a decimal. What does he write?

(b) Sam is calculating a percentage question. They have to work out 103% of £500. They want to write the percentage as a decimal. What do they write?

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Percentages to decimals - Exam Questions

1) **(a)** Write 0. 4 as a percentage

…………………%
(1)

(b) Write 0. 56 as a percentage

…………………%
(1)

(c) Write 1. 2 as a percentage

…………………%
(1)
(3 marks)

---

2) Circle the decimal equivalent to 0. 1%

0. 1   0. 01   0. 001   0. 0001

(1 mark)

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3) **(a)** Write 70% as a decimal

……………….
(1)

(b) Write 32% as a decimal

……………….
(1)

(c) Write 113% as a decimal

……………….
(1)
(3 marks)

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4) Circle the percentage equivalent to 1. 01

11%   101%   10. 1%   111%

(1 mark)

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Percentages to decimals - Answers

	Question	Answer
	Skill Questions	
Group A	Write these percentages as decimals: **1)** 30% **2)** 35% **3)** 35.8% **4)** 20% **5)** 29% **6)** 29.4% **7)** 70% **8)** 73% **9)** 73.6% **10)** 90% **11)** 99% **12)** 99.9%	**1)** 0.3 **2)** 0.35 **3)** 0.358 **4)** 0.2 **5)** 0.29 **6)** 0.294 **7)** 0.7 **8)** 0.73 **9)** 0.736 **10)** 0.9 **11)** 0.99 **12)** 0.999
Group B	Write these decimals as percentages: **1)** 0.5 **2)** 0.58 **3)** 0.584 **4)** 0.6 **5)** 0.61 **6)** 0.618 **7)** 0.7 **8)** 0.72 **9)** 0.729 **10)** 0.4 **11)** 0.45 **12)** 0.451	**1)** 50% **2)** 58% **3)** 58.4% **4)** 60% **5)** 61% **6)** 61.8% **7)** 70% **8)** 72% **9)** 72.9% **10)** 40% **11)** 45% **12)** 45.1%

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Percentages to decimals - Answers

Group C	Write the equivalent fraction / percentage:	
	1) 1%	**1)** 0.01
	2) 102%	**2)** 1.02
	3) 120%	**3)** 1.20
	4) 4%	**4)** 0.04
	5) 104%	**5)** 1.04
	6) 140%	**6)** 1.40
	7) 0.07	**7)** 7%
	8) 1.07	**8)** 107%
	9) 1.37	**9)** 137%
	10) 0.08	**10)** 8%
	11) 1.08	**11)** 108%
	12) 1.38	**12)** 138%

Percentages to decimals - Answers

		Question		Answer
		Applied Questions		
1)	**a)**	A calculator display shows $0.34672...$ Write this as a percentage correct to 1 decimal place.	**a)**	34.7%
	b)	A calculator display shows $0.82375...$ Write this as a percentage correct to 1 decimal place.	**b)**	82.4%
2)	**a)**	A calculator display shows $0.\dot{2}$ Write this as a percentage correct to 1 decimal place	**a)**	22.2%
	b)	A calculator display shows $0.\dot{6}$ Write this as a percentage correct to 1 decimal place.	**b)**	66.7%
3)	**a)**	A calculator display shows $0.\dot{5}\dot{8}$ Write this as a percentage correct to 1 decimal place.	**a)**	58.6%
	b)	A calculator display shows $0.\dot{9}4\dot{7}$ Write this as a percentage correct to 1 decimal place.	**b)**	94.8%
4)	**a)**	Fred is calculating a percentage question. He has to work out 35% of £480. He wants to write the percentage as a decimal. What does he write?	**a)**	0.35
	b)	Sam is calculating a percentage question. They have to work out 103% of £500. They want to write the percentage as a decimal. What do they write?	**b)**	1.03

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Percentages to decimals - Mark Scheme

		Question	Answer	
		Exam Questions		
1)	(a)	Write 0.4 as a percentage	(a) 40%	(1)
	(b)	Write 0.56 as a percentage	(b) 56%	(1)
	(c)	Write 1.2 as a percentage	(c) 120%	(1)
2)		Circle the decimal equivalent to 0.1% 0.1 0.01 0.001 0.0001	0.001	(1)
3)	(a)	Write 70% as a decimal	(a) 0.7	(1)
	(b)	Write 32% as a decimal	(b) 0.32	(1)
	(c)	Write 113% as a decimal.	(c) 1.13	(1)
4)		Circle the percentage equivalent to 1.01 11% 101% 10.1% 111%	101%	(1)