

Percentage of an Amount - Worksheet

Skill

Group A - Simple equivalent fractions (without a calculator)

Find:

- | | | |
|-----------------|-----------------|-----------------|
| 1) 50% of £200 | 2) 25% of £200 | 3) 10% of £200 |
| 4) 50% of 600km | 5) 25% of 600km | 6) 10% of 600km |
| 7) 50% of 320g | 8) 25% of 320g | 9) 10% of 320g |
| 10) 50% of £440 | 11) 25% of £440 | 12) 10% of £440 |
-

Group B - Build up with 10% and 1% (without a calculator)

Work out

- | | | |
|-----------------|-----------------|-----------------|
| 1) 11% of 300kg | 2) 23% of 300kg | 3) 42% of 300kg |
| 4) 11% of 400m | 5) 23% of 400m | 6) 42% of 400m |
| 7) 11% of £200 | 8) 23% of £200 | 9) 42% of £200 |
| 10) 11% of £700 | 11) 23% of £700 | 12) 42% of £700 |
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Group C - Using a calculator

Calculate

- | | | |
|-----------------|-----------------|-------------------|
| 1) 38% of £418 | 2) 47% of £418 | 3) 23.5% of £418 |
| 4) 38% of 512km | 5) 47% of 512km | 6) 23.5% of 512km |
| 7) 38% of 692g | 8) 47% of 692g | 9) 23.5% of 692g |
| 10) 38% of £924 | 11) 47% of £924 | 12) 23.5% of £924 |
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Percentage of an Amount - Worksheet

Applied

- 1) (a)** (Without a calculator)
A jumper is £20. In a sale it is reduced by 25%.
What is the sale price of the jumper?

(b) (Without a calculator)
A coat is £60. In a sale it is reduced by 25%.
What is the sale price of the coat?
- 2) (a)** (Without a calculator)
Beverley is paid £300 per week. Her pay increases by 7%.
What is this increase?

(b) (Without a calculator)
Chris is paid £400 per week. His pay increases by 6%.
What is this increase
- 3) (a)** (Without a calculator)
A school has 650 students. 52% of them are girls.
How many students are girls?

(b) (Without a calculator)
A company employs 850 people. 24% of them are men.
How many of the people are men?
- 4) (a)** (Without a calculator)
Decrease 700 g by 20%.

(b) (Without a calculator)
Increase 600 g by 30%.

Percentage of an Amount - Exam Questions

- 1) Non-calc Work out 30% of 500km.

.....
(2 marks)

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- 2) Non-calc Alice is paid £210 per week.
She is going to get an increase of 3% per week.

Work out how much Alice will be paid per week after the increase.

.....
(2 marks)

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- 3) Non-calc Baseball caps cost £7.20 each.
There is a special offer:
Buy 30 or more baseball caps, get 10% off the total cost.

Work out the actual cost of buying 31 baseball caps using the special offer.

.....
(4 marks)

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- 4) Non-calc Shop A and Shop B both sell the same type of dog biscuits.

Shop A sells 1000g with 20% off the normal price of £5.

Shop B is selling 1000g plus 20% extra for £5.

Which shop's dog biscuits are the better value for money?
You must show your working.

.....
(4 marks)

Percentage of an Amount - Answers

	Question	Answer
	Skill Questions	
Group A	Find - without a calculator 1) 50% of £200 2) 25% of £200 3) 10% of £200 4) 50% of 600km 5) 25% of 600km 6) 10% of 600km 7) 50% of 320g 8) 25% of 320g 9) 10% of 320g 10) 50% of £440 11) 25% of £440 12) 10% of £440	1) £100 2) £50 3) £20 4) 300km 5) 150km 6) 60km 7) 160g 8) 80g 9) 32g 10) £220 11) £110 12) £44
Group B	Work out - without a calculator 1) 11% of 300kg 2) 23% of 300kg 3) 42% of 300kg 4) 11% of 400m 5) 23% of 400m 6) 42% of 400m 7) 11% of £200 8) 23% of £200 9) 42% of £200 10) 11% of £700 11) 23% of £700 12) 42% of £700	1) 33kg 2) 69kg 3) 126kg 4) 44m 5) 92m 6) 168m 7) £22 8) £46 9) £84 10) £77 11) £161 12) £294

Percentage of an Amount - Answers

Group C	Calculate - with a calculator	
	1) 38% of £418	1) £158.84
	2) 47% of £418	2) £196.46
	3) 23.5% of £418	3) £98.23
	4) 38% of 512km	4) 194.56km
	5) 47% of 512km	5) 240.64km
	6) 23.5% of 512km	6) 120.32km
	7) 38% of 692g	7) 262.96g
	8) 47% of 692g	8) 325.24g
	9) 23.5% of 692g	9) 162.62g
	10) 38% of £924	10) £351.12
	11) 47% of £924	11) £434.28
	12) 23.5% of £924	12) £217.14

Percentage of an Amount - Answers

	Question	Answer
	Applied Questions	
1)	<p>a) Without a calculator. A jumper is £20. In a sale it is reduced by 25%. What is the sale price of the jumper?</p> <p>b) Without a calculator. A coat is £60. In a sale it is reduced by 25%. What is the sale price of the coat?</p>	<p>a) £15</p> <p>b) £45</p>
2)	<p>a) Without a calculator Beverley is paid £300 per week. Her pay increases by 7%. What is this increase?</p> <p>b) Without a calculator Chris is paid £400 per week. His pay increases by 6%. What is this increase?</p>	<p>a) £21</p> <p>b) £24</p>
3)	<p>a) Without a calculator. A school has 650 students. 52% of them are girls. How many students are girls?</p> <p>b) Without a calculator. A company employs 850 people. 24% of them are men. How many of the people are men?</p>	<p>a) 338 girls</p> <p>b) 204 men</p>
4)	<p>a) Without a calculator. Decrease 700g by 20%.</p> <p>b) Without a calculator. Increase 600g by 30%.</p>	<p>a) 560g</p> <p>b) 780g</p>

Percentage of an Amount - Mark Scheme

	Question	Answer	
	Exam Questions		
1)	Non-calc Work out 30% of 500km.	$500 \div 10 = 50$ $3 \times 50 = 150\text{km}$	(1) (1)
2)	Non-calc Alice is paid £210 per week. She is going to get an increase of 3% per week. Work out how much Alice will be paid per week after the increase.	$210 \div 100 \times 3 = 6.3$ $210 + 6.3 = £216.30$	(1) (1)
3)	Non-calc Baseball caps cost £7.20 each. There is a special offer: Buy 30 or more baseball caps, get 10% off the total cost. Work out the actual cost of buying 31 baseball caps using the special offer.	10% of £7.20 is £0.72 90% of £7.20 is £6.48 31×6.48 $= £200.88$	(1) (1) (1) (1)
4)	Non-calc Shop A and Shop B both sell the same type of dog biscuits. Shop A sells 1000g with 20% off the normal price of £5. Shop B is selling 1000g plus 20% extra for £5. Which shop's dog biscuits are the better value for money? You must show your working.	Shop A $5 \div 100 \times 80 = £4$ Shop B $1000 \div 100 \times 120 = 1200\text{g}$ $1000 \div 4 = 250\text{g per } £$ $1200 \div 5 = 240\text{g per } £$ 250g per £ is better value than 240g per £ and Shop A	(1) (1) (1) (1)

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