



11+ MATHEMATICS

Percentages Revision Sheet

Key facts · Method · Worked example · Quick check

Percentages come up in shopping, discount and test-score questions. The building-block method avoids calculators altogether.

Key facts

Per cent	Per cent means out of 100, so $35\% = 35/100 = 0.35$.
Building blocks	$10\% = \text{divide by } 10$. $1\% = \text{divide by } 100$. $5\% = \text{half of } 10\%$.
Useful equivalents	$50\% = 1/2$, $25\% = 1/4$, $75\% = 3/4$, $20\% = 1/5$, $10\% = 1/10$.
Increase and decrease	Find the percentage, then add it on (increase) or take it off (decrease).
Percentage change	$\text{Change} \div \text{original amount} \times 100$.

Method: building any percentage

- 1 Find 10% by dividing by 10.
- 2 Use 10%, 5% and 1% as blocks to build the percentage you need.
- 3 Add the blocks together.

Common mistakes

Watch out: Confusing 35% with 3.5%: 10% is $\div 10$, not $\div 100$.

Watch out: Giving only the increase when the question asks for the new price.

Watch out: Working out percentage change using the new amount instead of the original.

Worked example

Find 35% of 240.

Step	What to do	Working
1	Find 10%	$240 \div 10 = 24$
2	Find 30%	$24 \times 3 = 72$
3	Find 5% (half of 10%)	$24 \div 2 = 12$
4	Add 30% and 5%	$72 + 12 = 84$
✓	Answer	84

240 = 100%, split into ten 10% blocks of 24



Blocks: 10% = 24, 5% = half of 10% = 12

35% = 72 + 12 = 84

Quick check

	Question	Your answer
1	Find 15% of 60	
2	Increase 80 by 25%	
3	Write 12 out of 40 as a percentage	

Answers: 1) 9 2) 100 3) 30%

Put your percentages skills to the test.

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