

aw 29

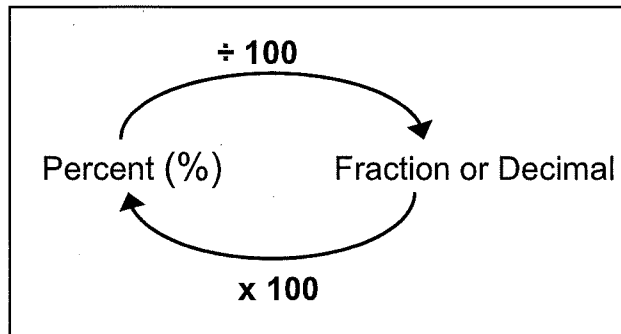
Percentages

What do percentages mean?

Percent (%) means per hundred.

e.g. 22% means 22 per 100, and can also be written as a fraction ($\frac{22}{100}$) or a decimal (0.22)

It is quite straightforward to convert a percent into a fraction or decimal (and vice versa) using the following rules:



Example:

- Write 42% as a fraction and a decimal:

$$42\% = \frac{42}{100} = \frac{21}{50} \quad (\text{simplified})$$

$$42\% = 0.42 \quad (42 \div 100)$$

- Write 0.05 as a percentage:

$$0.05 \times 100 = 5\%$$

Some Common Percentages:

The table shows some commonly used percentages and their equivalent decimal and fraction. It also shows the **easy way** to find these percentages. Try to learn, and remember, these:

Percent	Decimal	Fraction	How to work it out.
10%	0.1	$\frac{1}{10}$	÷10
20%	0.2	$\frac{1}{5}$	÷5
25%	0.25	$\frac{1}{4}$	÷4
50%	0.5	$\frac{1}{2}$	÷2
75%	0.75	$\frac{3}{4}$	÷4 then x3

Why Did the Elephants Laugh at Tarzan?

Complete the chart below by writing a fraction equivalent for each percent. Then do each exercise mentally. Write the letter of the exercise in the box above its answer.



50% =	$33\frac{1}{3}\%$ =	25% =	20% =	$12\frac{1}{2}\%$ =	10% =	1% =
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Rewrite each exercise using a fraction for the percent. Then compute mentally and write the answer.

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|-------------------------------------|--------------------------------------|---------------------------------------|
| T 25% of 36 cm | H 1% of 170 lb | T 10% of \$79.50 |
| U 20% of 150 cm | T $12\frac{1}{2}\%$ of 400 lb | A 50% of \$360 |
| H $33\frac{1}{3}\%$ of 18 cm | E 25% of 80 lb | Y 1% of \$999 |
| G 10% of 75 cm | H 20% of 60 lb | H $12\frac{1}{2}\%$ of \$64.80 |
| T 50% of 90 cm | O $33\frac{1}{3}\%$ of 240 lb | T 150% of \$18 |

\$7.95	6 cm	20 lb	\$9.99	60 lb	\$27	1.7 lb	80 lb	30 cm	7.5 cm	\$8.10	50 lb	52 cm	9 cm	12 lb	\$180	45 cm	\$25
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Rewrite each exercise using a fraction about equal to the percent. Then write an estimate of the answer.

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|-------------------------|--------------------------|--------------------------|
| A 19% of 40 mi | S 24% of 320 kg | N 49% of \$12.40 |
| N 33% of 90 mi | E 1.02% of 650 kg | I 26.3% of \$280 |
| S 52% of 280 mi | U 34.1% of 45 kg | S 12% of \$3200 |
| O 9.8% of 700 mi | H 21% of 300 kg | F 0.97% of \$6500 |
| Y 13% of 48 mi | W 10.4% of 9.4 kg | N 151% of \$500 |

about 60 kg	about \$70	about 140 mi	about 75 kg	about \$750	about 70 mi	about \$400	about 6.5 kg	about 10 mi	about 0.94 kg	about 8 mi	about 80 kg	about \$600	about \$65	about 15 kg	about \$6.20	about 30 mi	about 6 mi
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