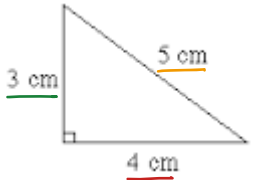
Perimeter and Area



Perimeter = $3+4+5 = 12\text{cm}$

Area = $\frac{3 \times 4}{2} = \frac{12}{2} = 6\text{cm}^2$

Fraction of an Amount

Find $\frac{6}{7}$ of 140 = $7\overline{)140} = 20$, $20 \times 6 = 120$

Find $\frac{1}{100}$ of 700 = $100\overline{)700} = 7$, $7 \times 1 = 7$

Powers

$2^3 = 2 \times 2 \times 2 = 8$

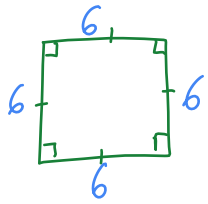
$\sqrt[3]{8} = 2$

$2^2 \times 3^2 = 4 \times 9 = 36$

Solutions by
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Perimeter and Area

What is the perimeter of a square that has an area of 36 square centimetres?

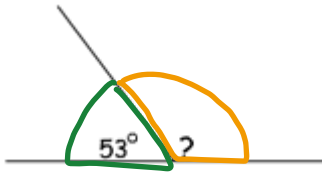


$\sqrt{36} = 6$

$6+6+6+6 = 24\text{cm}$

Angles

What is the missing angle?



$180 - 53 = 127$

Adding/Subtracting Fractions

$\frac{2}{3} + \frac{3}{5} = \frac{10}{15} + \frac{9}{15} = \frac{19}{15} = 1\frac{4}{15}$

$2\frac{1}{2} - \frac{2}{5} = \frac{25}{10} - \frac{4}{10} = \frac{21}{10} = 2\frac{1}{10}$

$\frac{5}{2}$

Multiplying Fractions

$\frac{\cancel{8}^{2}}{13} \times \frac{7}{\cancel{12}_{3}} = \frac{2 \times 7}{13 \times 3} = \frac{14}{39}$

$3\frac{2}{3} \times 1\frac{1}{5} = \frac{11}{3} \times \frac{6}{5} = \frac{66}{15} = \frac{22}{5} = 4\frac{2}{5}$

Dividing Fractions

$\frac{5}{11} \div \frac{5}{7} = \frac{5}{11} \times \frac{7}{5} = \frac{35}{55} = \frac{7}{11}$

$3\frac{2}{3} \div 1\frac{1}{5} = \frac{11}{3} \times \frac{5}{6} = \frac{55}{18} = 3\frac{1}{18}$

Worded Question

David has £5. He buys a pencil costing 15p, a ruler for £1.20 and a pen costing two pounds. How much change does David receive?

$15 + 120 + 200 = 335$

$500 - 335 = 165\text{p}$

£1.65

Averages

6 friends are going on holiday and it works out to be £120 each. 1 of them is the birthday boy so his friends decide to cover his cost. How much do all 5 friends need to each pay now?

$6 \times 120 = 720$

$720 \div 5 = £144$

Percentages

Increase £80 by 15%

10% = 8

5% = 4

15% = 12

$80 + 12 = £92$

Decrease £60 by 20%

10% = 6

20% = 12

$60 - 12 = £48$

Best Buy Question

Which is better value:

2 litres of squash for £1.36

or

5 litres of squash for £3.35?

$2\overline{)1.36} = 0.68$

$5\overline{)3.35} = 0.67$

$67\text{p} < 68\text{p}$

5 litre bottle as 67p per litre.