Dividing

The method I use is: Bus Stop

3374 ÷ 7

$$7\overline{)3374} = 482$$

Adding Decimals

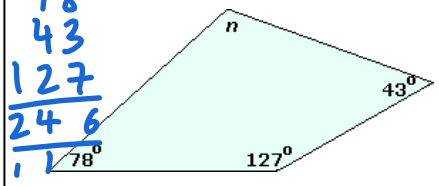
The method I use is: Column

1.4 + 2.07

$$\begin{array}{r} 1.40 \\ +2.07 \\ \hline 3.47 \end{array}$$

Angles in a Quadrilateral

Angles in a quadrilateral add up to: 360



78 + 43 + 127 + 246 = 494

What is the missing angle? 114°

360 − 246 = 114

Multiplying Decimals

0.03 x 0. 06

$0.03 \times 0.06 = 0.0018$

The rule for multiplying decimals is:

Count the decimal places.

Multiplying

The method I use is: Column

254 x 76

	70	6
200	14000	1200
50	3500	300
4	280	24

14000 + 3500 + 1200 + 300 + 280 + 24 = 19304

Powers and Roots

8^2 = 8 x 8 = 64

20^2 = 20 x 20 = 400

$\sqrt{16}$ = 4

When you square a number you multiply it by itself

Fraction of an Amount

Find 2/3 of 54

54 ÷ 3 = 18

18 x 2 = 36

To find an third of something you

divide by 3

Find 10% of

500 »» 50

120 »» 12

27 »» 2.7

To find 10% of something you:

divide by 10

Find 20% of

500 »» 100

120 »» 24

27 »» 5.4

Solutions by
Kenneth Stafford
MATHS TUTOR
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To find 20% of something you:

divide by 10 (10%)

Equivalent FDP

Fraction	Decimal	%
3/4	0.75	75%
1/5	0.2	20%
3/10	0.3	30%
9/10	0.9	90%

Multiplying Fractions

$\frac{3}{7} \times \frac{3}{4} = \frac{3 \times 3}{7 \times 4} = \frac{9}{28}$

The method for multiplying fractions is to:

Multiply top x top
bottom x bottom

Perimeter and Area

To find the perimeter of any shape you add the side lengths

To find the area of a rectangle you multiply length by width

Multiplying Decimals (2)

5.2 x 7.8

52 x 78 = 4056

5.2 x 7.8 = 40.56

The rule is: _____

Count the decimal places.

Estimation

Estimate:

48.5 x 10.4

≈ 50 x 10

= 500

Directed Number

6 – 8 = -2

-3 + 7 = 4

-3 – 10 = -13

-4 x -5 = 20

Proportion

Ten books cost £64.
How much does one book cost?

64 ÷ 10 = £6.40

Subtract 26

40 – 26 = 14

70 – 26 = 44

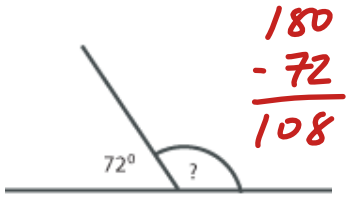
90 – 26 = 64

200 – 26 = 174

Angles on a Straight Line

Angles on a straight line add up to:

180

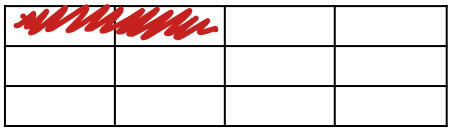


180
- 72
108

What is the missing angle? 108°

Shade a Fraction

Shade 1/6 of this shape.



Harder Percentages

Find 60% of 80 = 10% = 8, 8 x 6 = 48

Find 15% of 240 = 10% = 24, 5% = 12, 36

Find 90% of 300 = 10% = 30, 30 x 9 = 270

Sharing in a ratio

William and Kate share £200 in a 2:3 ratio. How much does William get?

2 + 3 = 5

200 ÷ 5 = 40

40 x 2 = £80

Finding an Average

5, 7, 9, 4, 6, 5

Mean = (5+7+9+4+6+5) ÷ 6 = 6

Mode = 5

Median = 5.5

4 5 5 6 7 9

5.5

Substitution

a = 2, b = 5

4a = 4 x 2 = 8

3a + b = 3 x 2 + 5 = 11

ab = 2 x 5 = 10

b^2 = 5 x 5 = 25

Simplifying Expressions

Simplify:

c + c + c + c = 4c

4d + 3d = d

7e + 2e – 3e = 6e

f x g = fg