MULTIPLICATIVE THINKING — SET 7



Knows all times tables as well as the inverse division times tables.

$$7 \times 8 = 56 \longrightarrow 56 \div 8 =$$

$$4 \times ? = 36 \longrightarrow 36 \div 4 =$$



Use known facts to split and solve

Inverse
$$8 \times ? = 208$$

Find known fact
$$8 \times 10 = 80$$

Double it
$$8 \times 20 = 160$$

Work out the difference 208 - 160 = 48

Solve the difference
$$8 \times 6 = 48$$

Add the answers
$$20 + 6 = 26$$

$$208 \div 8 = 26$$



Use rounding and compensation to solve problems.

$$37 \times 5 =$$

Round number up
$$37 + 3 = 40$$

Round up
$$40 \times 5 = 200$$

Compensate
$$3 \times 5 = 15$$

Find the difference
$$200 - 15 = 185$$

$$37 \times 5 = 185$$



Multiplying and dividing simple decimals and fractions and fractions.

Double to solve

Split to solve

 $5.5 \times 7 =$

$$3.5 \times 4 =$$

5 x 7 = 35

$$7 \times 4 = 28$$

½ x 7 = 3.5

$$3.5 \times 4 = 14$$

35 + 3.5 = 38.5

 $5.5 \times 7 = 38.5$

Double to solve

Double both to solve

$$72 \div 4.5 =$$

15 ÷1 ½ =

$$72 \div 9 = 8$$

 $30 \div 3 = 10$

$$72 \div 4.5 = 16$$

Cross Products Multiplication Method

(This method can solve all multiplication problems)

		10s	1s
	X	80	6
10s	20	1,600	120
1s	3	240	18

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(F) Long Division

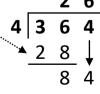
(This method can solve all division problems)

$$364 \div 14 =$$

Divide: $36 \div 14 = 2$ with left over

Multiply: $2 \times 14 = 28$. 1×4 Subtract: 36 - 28 = 4

Subtract: 36 – 28 = Bring Down: the 4



(Repeat) Divide : $84 \div 14 = \underline{6}$

Multiply: <u>6</u> x 14 = 84 Subtract: 84 – 84 = 0

8 4

Bring down: as the answer is 0 there is no remainder so is the end.