

**Check out**

You should now be able to ...

	Questions
✓ Consolidate mental and written strategies for addition and subtraction of decimals.	6
✓ Consolidate mental and written strategies for multiplication and division of decimals.	6
✓ Know and use the correct order of operations.	7
✓ Use the function keys on a calculator and interpret the calculator display.	7

**Test it**

Questions
1 - 2
3 - 6
7
8 - 9



**Language Meaning**

**Example**

<b>Partitioning</b>	Splitting a number into parts to make a mental calculation easier.	$5.7 \cdot 6.6 = 5.7 \cdot 6 \cdot 0.6$
<b>Factor</b>	Factors of a number divide into it exactly.	The factors of 6 are 1, 2, 3 and 6
<b>Divisor</b>	The number you divide by.	In $10 \div 5 = 2$ , 5 is the divisor
<b>Order of operations</b>	A standard order of doing operations in a calculation: <b>B</b> brackets <b>I</b> powers/indices <b>D</b> division <b>M</b> multiplication <b>A</b> addition <b>S</b> subtraction.	$3 + (4^2 - 7 \times 2)$ $= 3 + (16 - 14)$ $= 5$
<b>Rounding errors</b>	Errors that occur by rounding an intermediate answer in a calculation.	
<b>Remainder</b>	The number left after a division.	$26 \div 5 = 5$ remainder 1
<b>Estimate</b>	Work out an approximate answer.	An estimate of £7.56 shared between 5 people would be: $8 \div 10 = 0.8$ or 80p.

1 Work out these without using a calculator.

- a  $0.383 + 5.48 + 89.1$
- b  $103.2 + 25.11 + 1.57$
- c  $9.56 - 0.892 + 0.09$
- d  $44.42 - 0.147 - 0.0319$

2 Three adults in a lift have a combined weight of 195.4 kg.

The weights of two of the adults are 65.03 kg and 77 kg. What is the weight of the third adult?

3 Work these out using a written method.

- a  $3.1 \times 4.5$
- b  $0.4 \times 57.4$
- c  $31.8 \times 0.28$
- d  $816 \times 1.58$

4 Carrots cost 1.32 per kg and come in 750g bags. What is the cost of six bags?

5 Work out these, give your answer with a remainder.

- a  $39 \div 7$
- b  $437 \div 8$
- c  $699 \div 9$
- d  $626 \div 12$

6 Work out these, give your answer to 1 dp where appropriate.

- a  $836 \div 3.8$
- b  $741 \div 3.5$
- c  $509 \div 0.8$
- d  $767 \div 1.9$

7 Calculate these, giving your answer to 2 dp where appropriate.

- a  $(47 - 2^5) \times 3$
- b  $\frac{\sqrt{130 + 2 \times 9}}{25 - 17.1}$
- c  $14 \times (7.3 - 2.4)^3$
- d  $\frac{(8.1 - 9.9)^2}{\sqrt{19.3 + 7.8}}$

8 Convert these measurements.

- a 2095 cm to m and cm
- b 1678 s to minutes and seconds
- c 5243 mm to m, cm and mm
- d 49088 minutes to weeks, days, hours and minutes

9 Terrence has eight 1.35l bottles of orange juice. He fills 250 ml glasses with the juice.

- a How many glasses can he fill completely?
- b How much orange juice is left over?

**What next?**

Score	What next?
0 - 4	Your knowledge of this topic is still developing. To improve look at Formative test: 3B-7; MyMaths: 1007, 1008, 1010, 1011, 1167, 1932 and 1933
5 - 7	You are gaining a secure knowledge of this topic. To improve look at Invisipen: 128, 129, 131, 132, 133 and 134
8 - 9	You have mastered this topic. Well done, you are ready to progress!