Success in Seven Answers – Monday, Week 3

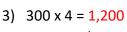| Week 3 – Day 1 |
| --- |
| _____ + 6.07 = 6.87 |
| 1643 ÷ 31 = |
| = 300 x 4 |
| = 1/3 x 8 |
| = 3^2 + 2^3 |
| 15 ÷ 1000 = |
| 20% x 3500 = |

1) 0.8 + 6.07 = 6.87

A good place value one to start with. We know that 6.07 + something is 6.87. The place value chart can help. We have 6 units, 0 tenths and 7 hundredths. We can see that the difference between 6.07 and 6.87 is therefore 8 tenths (0.8) and this is what we add to 6.07 to make 6.87.

Thousands	Hundreds	Tens	Units	Decimal Point	Tenths	Hundredths	Thousandths	Ten-Thousandths	Hundred thousandths
			6	.	0	7			
			+	.	↓	+8 ↓	↓		
			6	.	8	7			
				.					

2) 1643 ÷ 31 = 53

Long method of division needed and your known facts for 31x table. Check your calculating against this one:

3) 300 x 4 = 1,200

Use your known fact of 3 x 4 = 12. 300 is one hundred times bigger than 3, so we must remember our answer is one hundred times bigger too. 12 x 100 = 1,200
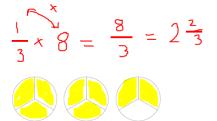
4) 1/3 x 8 = 2 2/3

Here you are being asked for 8 bits of a third.
Did you remember the procedure?
Remember – it's okay to use visuals if you need them ☺.

$$\frac{1}{3} \times 8 = \frac{8}{3} = 2\frac{2}{3}$$

5) 3^2 + 2^3 = 17

3^2 = 3 x 3 and 2^3 = 2 x 2 x 2. We have to solve each part separately and then add the answers together. 3 x 3 = 9 and 2 x 2 x 2 = 8. Cubing a number can be difficult – be careful, we have to do 2 x 2 = 4 and then 4 x 2 = 8 not. Then we must add the answers together = 9 + 8 = 17.

6) 15 ÷ 1000 = 0.015

15 is becoming a thousand times smaller. The digits will move three places to the right.
This should have been answered using mental methods only.

Thousands	Hundreds	Tens	Units	Decimal Point	Tenths	Hundredths	Thousandths	Ten-Thousandths	Hundred thousandths
		1	5	.					
			0	.	0	1	5		
				.					

7) 20% x 3500 = 700

Find 10% first by doing 3500 ÷ 10 = 350 and then double the answer to get 20%:
350 x 2 = 700