The 3, 6 and 9 times-tables

1 Complete the number tracks.

Use what you notice about each pair to complete the sentences.

a)

| 3 | 6 | | 12 | | 18 | |

| 6 | | 18 | 24 | 30 | | |

The 6 times-table is _____ the 3 times-table.

b)

| | 6 | 9 | | | | 21 |

| 9 | 18 | | 36 | | | |

The 9 times-table is _____ the 3 times-table.

2 Complete the calculations.

a) 9 × 3 = ☐

b) 3 × 7 = ☐

c) 6 × 7 = ☐

d) 9 × ☐ = 36

e) 6 × ☐ = 36

f) 72 ÷ 9 = ☐

g) 48 ÷ 6 = ☐

h) 24 ÷ ☐ = 3

3 Here is a hundred square.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

a) Circle the multiples of 3 on the hundred square.

b) Shade the multiples of 6

c) Underline the multiples of 9

What do you notice?

4 Are the statements always true, sometimes true or never true?

a) Multiples of 9 are also multiples of 3 _____

b) Multiples of 3 are also multiples of 6 _____

c) Multiples of 6 are also multiples of 9 _____
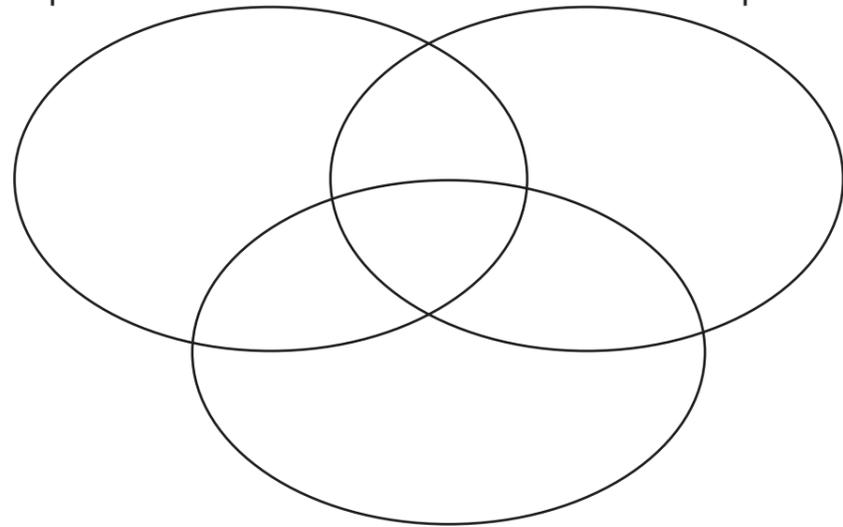
Explain your reasons.

5 Write the numbers in the sorting diagram.

3   18   27   54   93   66   12   39
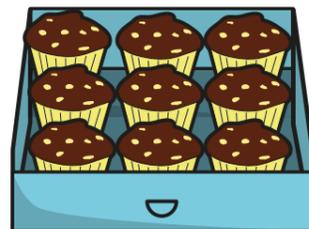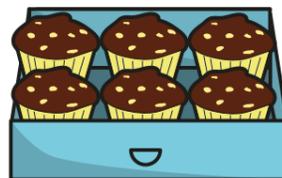
multiples of 3   multiples of 6

multiples of 9

6 Muffins are sold in boxes of 3, 6 and 9

Mrs Rose buys three of each size box.

How many muffins does Mrs Rose have altogether?

Compare methods with a partner.

7

36 ÷ 3 = 12
6 is double 3,
so 36 ÷ 6 = 24

Do you agree with Tiny? _____

Talk about your answer with a partner.

8

I know that
3 × 42 = 126

a) Use Amir's fact to find 6 × 42

b) Use Amir's fact to find 42 × 9

9 Complete the number sentence by writing the same digit in each box.

$$6 \div \boxed{} < 6 + \boxed{} < \boxed{} \times 3$$