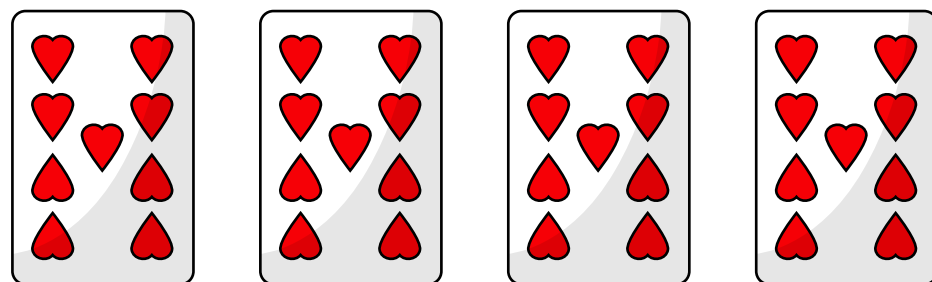


9 times-table and division facts

1 How many hearts are there in total?

Complete the multiplication fact.



$$\square \times \square = \square$$

2 Colour all the multiples of 9

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

What pattern do you notice?

Use the 100 square to complete these calculations.

$$72 \div 9 = \square$$

$$27 \div 9 = \square$$

3 Complete the calculations.

$$\text{a) } 3 \times 9 = \square$$

$$\text{g) } 6 \times 9 = \square$$

$$\text{b) } \square \div 9 = 12$$

$$\text{h) } 9 \times \square = 18$$

$$\text{c) } 9 \times 4 = \square$$

$$\text{i) } 9 \times \square = 72$$

$$\text{d) } \square \div 9 = 1$$

$$\text{j) } \square \div 9 = 11$$

$$\text{e) } 11 \times 9 = \square$$

$$\text{k) } \square \times 9 = 45$$

$$\text{f) } 10 \times 9 = \square$$

$$\text{l) } 20 \times 9 = \square$$

4 Complete the number tracks.

0	9	18				54	
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108	99			72			45	36
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- 5 These numbers are all multiples of 9

45	54	18	108
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- a) Show that the sum of the digits of each number is the same.

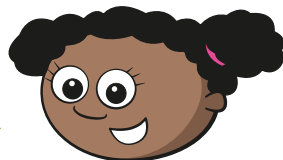
- b) These numbers are also multiples of 9

198	657	891	999
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What is the sum of the digits of each number?

c)

I've noticed something about the sum of the digits of numbers that are multiples of 9

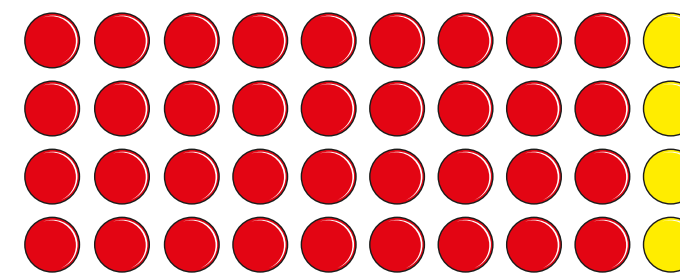


What do you think Whitney has noticed?

- d) 7,59_ is a multiple of 9

What is the missing digit?

- 6 Jack is making arrays.



- a) Use the arrays to complete the multiplications.

$1 \times 10 = \square$

$1 \times 9 = \square$

$2 \times 10 = \square$

$2 \times 9 = \square$

$3 \times 10 = \square$

$3 \times 9 = \square$

$4 \times 10 = \square$

$4 \times 9 = \square$

- b) Write steps for a partner to explain how you can use the 10 times-table to multiply by 9

- c) Use your steps to work out these multiplications.

$19 \times 9 = \square$

$72 \times 9 = \square$

