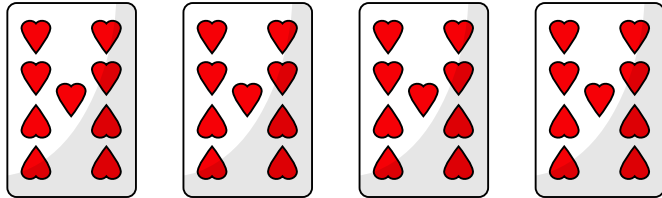


1 How many hearts are there in total?

Complete the multiplication fact.



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

2 Colour all the multiples of 9 on a hundred square.

What pattern do you notice?

Use the hundred square to work out these calculations.

$$72 \div 9 \quad 27 \div 9$$

3 Complete the calculations.

a) $3 \times 9 = \square$

e) $11 \times 9 = \square$

i) $9 \times \square = 72$

b) $\square \div 9 = 12$

f) $10 \times 9 = \square$

j) $\square \div 9 = 11$

c) $9 \times 4 = \square$

g) $6 \times 9 = \square$

k) $\square \times 9 = 45$

d) $\square \div 9 = 1$

h) $9 \times \square = 18$

l) $20 \times 9 = \square$

4 Complete the number tracks.

0	9	18				54	
---	---	----	--	--	--	----	--

108	99			72			45	36
-----	----	--	--	----	--	--	----	----

5 These numbers are all multiples of 9

45	54	18	108
----	----	----	-----

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
-----	-----	-----	-----

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?

4 Complete the number tracks.

0	9	18				54		
108	99			72			45	36

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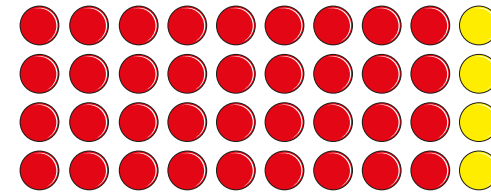


What do you think Whitney has noticed?

d) 7,59_ is a multiple of 9

What is the missing digit?

6 Jack is making arrays.



a) Use the arrays to work out the multiplications.

- | | |
|---------------|--------------|
| 1×10 | 1×9 |
| 2×10 | 2×9 |
| 3×10 | 3×9 |
| 4×10 | 4×9 |

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.

- | | |
|---------------|---------------|
| 19×9 | 72×9 |
|---------------|---------------|

