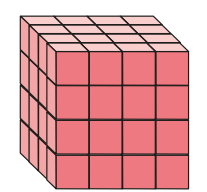
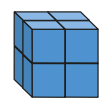
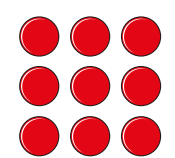


Square and cube numbers

- 1 Use counters to show that 4, 9 and 16 are square numbers.
Draw your answers.



- 2 Match the representations.



4^2

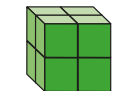
4 cubed

3 squared

4×4

2^3

- 3 Here is a $2 \times 2 \times 2$ cube.



How many cubes do you need to build a $3 \times 3 \times 3$ cube?

- 4 Complete the table.

2^2	2×2	4
2^3	$2 \times 2 \times 2$	
3^2		
3^3		
<div><div></div>²</div>		25
	$5 \times 5 \times 5$	



5 Write $<$, $>$ or $=$ to complete the statements.

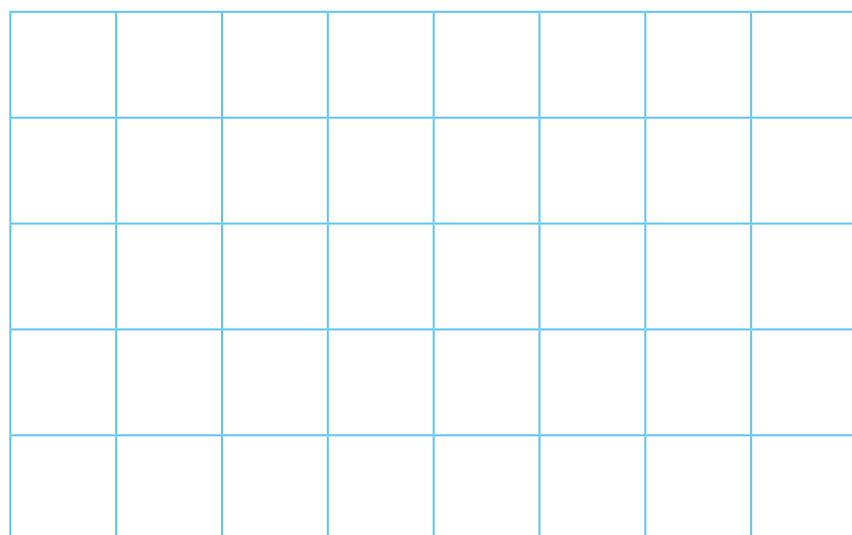
2 squared 2 cubed

2 squared 2×2

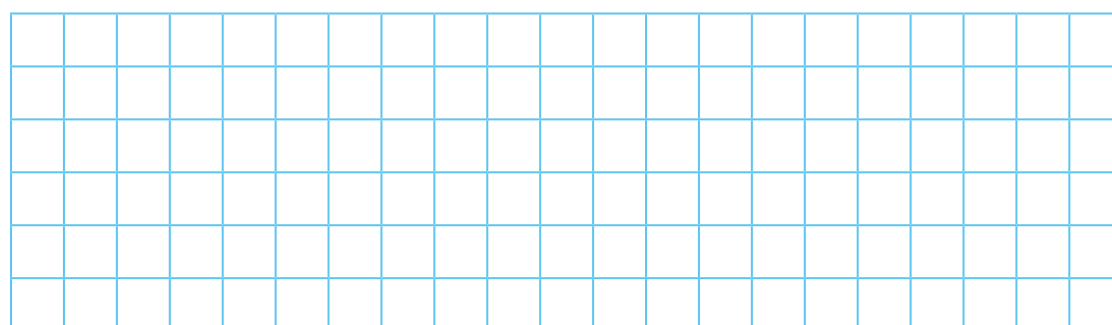
2 squared 4

2 squared 1 cubed

6 Draw 3 straight lines to split this grid into 3 squares and 1 rectangle.



7 Find four square numbers between 100 and 200



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8 Dexter works out 20 squared.

Annie works out 20 cubed.

Find the difference between Dexter's and Annie's numbers.

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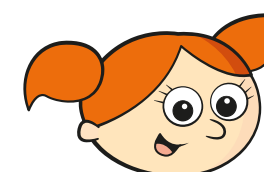
9 a)

I am thinking of 2 numbers. When I add them I get a prime number. When I multiply them I get a square number.



What numbers could Mo be thinking of?

b)



I am thinking of 2 numbers. When I add them I get a square number. When I multiply them I get a prime number.

What numbers could Alex be thinking of?
