Square and cube numbers



1 Use counters to show that 4, 9 and 16 are square numbers.

Draw your answers.



2 Match the representations to the labels.









4 cubed

3 squared



2³

3 Here is a 2 × 2 × 2 cube made of 8 small cubes. How many small cubes do you need to build a 3 × 3 × 3 cube?





4 Complete the table.

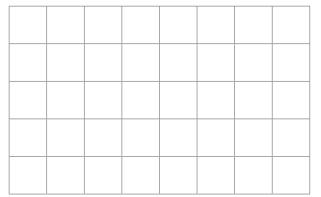
2 ²	2 × 2	4
23	2 × 2 × 2	
3 ²		
33		
2		25
	5 × 5 × 5	



Write <, > or = to complete the statements.

2 squared	2 cubed
2 squared	2 × 2
2 squared	4
2 squared	1 cubed

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



- 7 Find four square numbers between 100 and 200
- 8 Dexter works out 20 squared.

Annie works out 20 cubed.

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

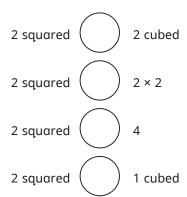




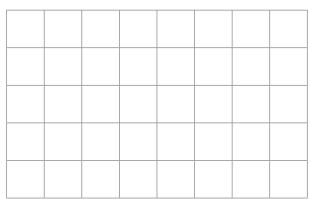
Square and cube numbers



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Annie works out 20 cubed.

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



a)

I am thinking of two 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 two 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?

