Cube Numbers

Cube Numbers

1a. Circle the odd one out.

$$3^3 + 23$$

$$4^3 - 14$$

$$2^3 + 32$$

Explain your reasoning.



2a. Mo says,



The number 125 is a cube number. 1b. Circle the odd one out.

$$5^3 - 25$$

$$1^3 + 90$$

$$4^3 + 36$$

Explain your reasoning.



2b. Bella says,



The number 27 is a cube number.

Is he correct? Prove it.



R

3a. Solve the word problem below.

I am thinking of a number.

If I cube my number, then add 7, I get another cube number.

What number am I thinking of?

Is she correct? Prove it.



3b. Solve the word problem below.

I am thinking of a number.

If I cube my number, then take away 37, I get another cube number.

What number am I thinking of?



12

PS



Cube Numbers

Cube Numbers

4a. Circle the odd one out.

 $7^3 + 157$

 $11^3 + 210$

 $10^3 - 350$

 $9^3 - 384$

 $9^3 - 229$

 $6^3 + 129$

Explain your reasoning.

Explain your reasoning.

4b. Circle the odd one out.



5a. Ivan says,

5b. Kayleigh says,



The number 1,728 is a cube number.



The number 733 is a cube number.

Is he correct? Prove it.

Is she correct? Prove it.





6a. Solve the word problem below.

I am thinking of a number.

If I cube my number, then add 271, I get another cube number.

What number am I thinking of?

6b. Solve the word problem below.

I am thinking of a number.

If I cube my number, then take away 169, I get another cube number.

What number am I thinking of?





Cube Numbers

Cube Numbers

7a. Circle the odd one out.

$$11^3 - 3^2$$

$$6^3 - 12^2$$

$$2^3 + 8^2$$

Explain your reasoning.



8a. Danny says,



The answer to $12^3 - 12^2$ is a cube number.

7b. Circle the odd one out.

$$10^3 + 712$$

$$12^3 - 4^2$$

$$9^3 + 9^2$$

Explain your reasoning.



8b. Kiran says,



The answer to 8³ + 11² is a cube number.

Is he correct? Prove it.



9a. Solve the word problem below.

I am thinking of a number.

If I cube my number, then add the square number, I get the answer 810.

What number am I thinking of?



9b. Solve the word problem below.

I am thinking of a number.

Is she correct? Prove it.

If I cube my number, then take away the square number, I get the answer 1,210.

What number am I thinking of?





PS