

Task: Use logic reasoning to make a conjecture about the next number in the pattern:

1, 8, 27, 64.....

Solution:

It's easy to see, that:

$$1=1\times 1\times 1,$$

$$8=2\times 2\times 2,$$

$$27=3\times 3\times 3,$$

$$64=4\times 4\times 4,$$

...

If we continue this pattern, we'll get:

$$5\times 5\times 5=125$$

Answer: 125.