



## Prime Factorization - Is Number a Factor - From Variable as Factors

1

$$z = 2 \cdot 3^2 \cdot 7$$

Is  $z$  a factor of 3465

$$3465 = 3^2 \cdot 5 \cdot 7 \cdot 11$$

is  $z$  a factor of 3465?

A

Yes

B

No

2

$$n = 2^2 \cdot 3 \cdot 7$$

Is  $n$  a factor of 420

$$420 = 2^2 \cdot 3 \cdot 5 \cdot 7$$

is  $n$  a factor of 420?

A

Yes

B

No

3

$$m = 2^3 \cdot 7$$

Is  $m$  a factor of 168

$$168 = 2^3 \cdot 3 \cdot 7$$

is  $m$  a factor of 168?

A

Yes

B

No

4

$$c = 2 \cdot 5 \cdot 7^2$$

Is  $c$  a factor of 1470

$$1470 = 2 \cdot 3 \cdot 5 \cdot 7^2$$

is  $c$  a factor of 1470?

A

Yes

B

No

5

$$n = 2 \cdot 5^2 \cdot 7$$

Is  $n$  a factor of 5775

$$5775 = 3 \cdot 5^2 \cdot 7 \cdot 11$$

is  $n$  a factor of 5775?

A

Yes

B

No

6

$$b = 2 \cdot 3 \cdot 5 \cdot 7$$

Is  $b$  a factor of 2310

$$2310 = 2 \cdot 3 \cdot 5 \cdot 7 \cdot 11$$

is  $b$  a factor of 2310?

A

Yes

B

No

7

$$r = 2 \cdot 3^2 \cdot 5$$

Is  $r$  a factor of 3465

$$3465 = 3^2 \cdot 5 \cdot 7 \cdot 11$$

is  $r$  a factor of 3465?

A

Yes

B

No

8

$$n = 2 \cdot 5 \cdot 7^2$$

Is  $n$  a factor of 1470

$$1470 = 2 \cdot 3 \cdot 5 \cdot 7^2$$

is  $n$  a factor of 1470?

A

Yes

B

No