



Prime Factorization - Is Number a Factor - From Value as Factors

1
 $135 = 3^3 \cdot 5$

Is 135 a factor of 270

$270 = 2 \cdot 3^3 \cdot 5$

is 135 a factor of
270?

A

Yes

B

No

2
 $189 = 3^3 \cdot 7$

Is 189 a factor of 378

$378 = 2 \cdot 3^3 \cdot 7$

is 189 a factor of
378?

A

Yes

B

No

3

$315 = 3^2 \cdot 5 \cdot 7$

Is 315 a factor of 2310

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

is 315 a factor of
2310?

A

Yes

B

No

4

$210 = 2 \cdot 3 \cdot 5 \cdot 7$

Is 210 a factor of 15015

$15015 = 3 \cdot 5 \cdot 7 \cdot 11 \cdot 13$

is 210 a factor of
15015?

A

Yes

B

No

5

$140 = 2^2 \cdot 5 \cdot 7$

Is 140 a factor of 660

$660 = 2^2 \cdot 3 \cdot 5 \cdot 11$

is 140 a factor of
660?

A

Yes

B

No

6

$294 = 2 \cdot 3 \cdot 7^2$

Is 294 a factor of 5390

$5390 = 2 \cdot 5 \cdot 7^2 \cdot 11$

is 294 a factor of
5390?

A

Yes

B

No

7

$350 = 2 \cdot 5^2 \cdot 7$

Is 350 a factor of 5775

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

is 350 a factor of
5775?

A

Yes

B

No

8

$84 = 2^2 \cdot 3 \cdot 7$

Is 84 a factor of 420

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

is 84 a factor of
420?

A

Yes

B

No