Prime Factorization - Is Number a Multiple of Both - From Variables as Factors

1 $n = 3 \cdot 7^2$

Is n a multiple of both 35 and 21?

$35 = 5 \cdot 7$
$21 = 3 \cdot 7$

is n a multiple of 35 and 21?

A	B
Yes	No

2 $r = 3^2 \cdot 5$

Is r a multiple of both 9 and 15?

$9 = 3^2$
$15 = 3 \cdot 5$

is r a multiple of 9 and 15?

A	B
Yes	No

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

Is d a multiple of both 14 and 10?

$14 = 2 \cdot 7$
$10 = 2 \cdot 5$

is d a multiple of 14 and 10?

A	B
Yes	No

4 $n = 2 \cdot 5 \cdot 7$

Is n a multiple of both 10 and 35?

$10 = 2 \cdot 5$
$35 = 5 \cdot 7$

is n a multiple of 10 and 35?

A	B
Yes	No

5 $p = 2^2 \cdot 7$

Is p a multiple of both 4 and 14?

$4 = 2^2$
$14 = 2 \cdot 7$

is p a multiple of 4 and 14?

A	B
Yes	No

6 $b = 3 \cdot 5^2$

Is b a multiple of both 33 and 25?

$33 = 3 \cdot 11$
$25 = 5^2$

is b a multiple of 33 and 25?

A	B
Yes	No

7 $c = 5 \cdot 7^2$

Is c a multiple of both 21 and 35?

$21 = 3 \cdot 7$
$35 = 5 \cdot 7$

is c a multiple of 21 and 35?

A	B
Yes	No

8 $p = 3^2 \cdot 5$

Is p a multiple of both 21 and 15?

$21 = 3 \cdot 7$
$15 = 3 \cdot 5$

is p a multiple of 21 and 15?

A	B
Yes	No