Math worksheet on *'Prime Factorization - Is Number a Factor of Both - From Variables as Factors (Level 3)'*. Part of a broader unit on *'Factoring and Greatest Common Factor - Advanced'*

Learn online:

app.mobius.academy/math/units/factoring_and_greatest_common_factor_advanced/

1

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

Is y a factor of both 2310 and 2730?

$2310 = 2 \cdot 3 \cdot 5 \cdot 7 \cdot 11$
$2730 = 2 \cdot 3 \cdot 5 \cdot 7 \cdot 13$

is y a factor of 2310 and 2730?

a	b
Yes	No

2

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

Is z a factor of both 1050 and 1650?

$1050 = 2 \cdot 3 \cdot 5^2 \cdot 7$
$1650 = 2 \cdot 3 \cdot 5^2 \cdot 11$

is z a factor of 1050 and 1650?

a	b
Yes	No

3

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

Is p a factor of both 420 and 660?

$420 = 2^2 \cdot 3 \cdot 5 \cdot 7$
$660 = 2^2 \cdot 3 \cdot 5 \cdot 11$

is p a factor of 420 and 660?

a	b
Yes	No

4

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

Is x a factor of both 2310 and 2730?

$2310 = 2 \cdot 3 \cdot 5 \cdot 7 \cdot 11$
$2730 = 2 \cdot 3 \cdot 5 \cdot 7 \cdot 13$

is x a factor of 2310 and 2730?

a	b
Yes	No

5

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

Is r a factor of both 630 and 3465?

$630 = 2 \cdot 3^2 \cdot 5 \cdot 7$
$3465 = 3^2 \cdot 5 \cdot 7 \cdot 11$

is r a factor of 630 and 3465?

a	b
Yes	No

6

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

Is r a factor of both 420 and 1650?

$420 = 2^2 \cdot 3 \cdot 5 \cdot 7$
$1650 = 2 \cdot 3 \cdot 5^2 \cdot 11$

is r a factor of 420 and 1650?

a	b
Yes	No

7

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

Is y a factor of both 2450 and 3675?

$2450 = 2 \cdot 5^2 \cdot 7^2$
$3675 = 3 \cdot 5^2 \cdot 7^2$

is y a factor of 2450 and 3675?

a	b
Yes	No