



Math worksheet on 'Prime Factorization - Is Integer a Factor of Both - From Values 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

$$490 = c \cdot d \cdot z^2$$

Is 490 a factor of both
3234 and 2730?

$$3234 = 2 \cdot 3 \cdot 7^2 \cdot 11$$

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

is 490 a factor of
3234 and 2730?

a

Yes

b

No

2

$$90 = d \cdot n^2 \cdot m$$

Is 90 a factor of both 630
and 990?

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

$$990 = 2 \cdot 3^2 \cdot 5 \cdot 11$$

is 90 a factor of
630 and 990?

a

Yes

b

No

3

$$315 = r^2 \cdot p \cdot z$$

Is 315 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 315 a factor of
630 and 3465?

a

Yes

b

No

4

$$225 = n^2 \cdot b^2$$

Is 225 a factor of both
630 and 1650?

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

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

is 225 a factor of
630 and 1650?

a

Yes

b

No

5

$$126 = d \cdot y^2 \cdot b$$

Is 126 a factor of both
2310 and 4095?

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

$$4095 = 3^2 \cdot 5 \cdot 7 \cdot 13$$

is 126 a factor of
2310 and 4095?

a

Yes

b

No

6

$$84 = y^2 \cdot p \cdot x$$

Is 84 a factor of both 420
and 924?

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

$$924 = 2^2 \cdot 3 \cdot 7 \cdot 11$$

is 84 a factor of
420 and 924?

a

Yes

b

No

7

$$40 = p^3 \cdot d$$

Is 40 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 40 a factor of
420 and 660?

a

Yes

b

No