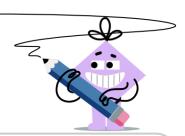


mobius

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



Is y a multiple of both 20

and 28?

Is d a multiple of both

245 and 105?

Is z a multiple of both 45

and 75?

В

| 4 | - 3 | ractors |
|---|-------------|---------|
| | $n - 2^{3}$ | . 3 |

Is y a multiple of both 12

$$12 = 2^2 \cdot 3$$

8 = 2^3

12 and 8?

and 8?

В

is
$$y$$
 a multiple of

No

 $20 = 2^2 \cdot 5$ $28 = 2^2 \cdot 7$

$$28 = 2^2 \cdot 7$$

is y a multiple of 20 and 28?

| 4 | |
|---|-----|
| | Yes |

No

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

Is r a multiple of both 70 and 343?

Yes

$$70 = 2 \cdot 5 \cdot 7$$

 $343 = 7^3$

is r a multiple of 70 and 343?

| Α | В | |
|-----|---|----|
| Yes | | No |

$d=3\cdot5\cdot7^2$

 $245 = 5 \cdot 7^2$ $105 = 3 \cdot 5 \cdot 7$

is d a multiple of 245 and 105?

| Α | | В |
|---|-----|---|
| | Yes | |

No

5
$$p = 5^3 \cdot 7$$

Is p a multiple of both 105 and 175?

$$105 = 3.5.7$$

$$175 = 5^2 \cdot 7$$

is p a multiple of 105 and 175?

| Α | В |
|-----|----|
| Yes | No |

6
$$z = 3^2 \cdot 5^2$$

 $45 = 3^2 \cdot 5$ $75 = 3 \cdot 5^2$

is
$$z$$
 a multiple of 45 and 75?



No

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

$$45 = 3^2 \cdot 5 \\ 18 = 2 \cdot 3^2$$

is b a multiple of 45 and 18?

Yes No

8
$$c = 3^2 \cdot 5 \cdot 7$$

 $30 = 2 \cdot 3 \cdot 5$ $105 = 3 \cdot 5 \cdot 7$

is c a multiple of 30 and 105?

Is c a multiple of both 30 and 105?

Yes No