



## Prime Factorization - Is Number a Factor - From Variable as Factors

**1**  
 $x = 2 \cdot 5 \cdot 7$   
 Is  $x$  a factor of 210

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

is  $x$  a factor of 210?

|     |    |
|-----|----|
| A   | B  |
| Yes | No |

**2**  
 $p = 3 \cdot 7^2$   
 Is  $p$  a factor of 490

$$490 = 2 \cdot 5 \cdot 7^2$$

is  $p$  a factor of 490?

|     |    |
|-----|----|
| A   | B  |
| Yes | No |

**3**  
 $x = 2 \cdot 3 \cdot 5$   
 Is  $x$  a factor of 462

$$462 = 2 \cdot 3 \cdot 7 \cdot 11$$

is  $x$  a factor of 462?

|     |    |
|-----|----|
| A   | B  |
| Yes | No |

**4**  
 $r = 2 \cdot 3 \cdot 5$   
 Is  $r$  a factor of 210

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

is  $r$  a factor of 210?

|     |    |
|-----|----|
| A   | B  |
| Yes | No |

**5**  
 $y = 2 \cdot 5^2$   
 Is  $y$  a factor of 150

$$150 = 2 \cdot 3 \cdot 5^2$$

is  $y$  a factor of 150?

|     |    |
|-----|----|
| A   | B  |
| Yes | No |

**6**  
 $c = 2 \cdot 3 \cdot 7$   
 Is  $c$  a factor of 210

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

is  $c$  a factor of 210?

|     |    |
|-----|----|
| A   | B  |
| Yes | No |

**7**  
 $x = 2 \cdot 5^2$   
 Is  $x$  a factor of 210

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

is  $x$  a factor of 210?

|     |    |
|-----|----|
| A   | B  |
| Yes | No |

**8**  
 $m = 2 \cdot 5 \cdot 7$   
 Is  $m$  a factor of 330

$$330 = 2 \cdot 3 \cdot 5 \cdot 11$$

is  $m$  a factor of 330?

|     |    |
|-----|----|
| A   | B  |
| Yes | No |