



Math worksheet on 'Prime Factorization - Is Number a Factor of Both - From Values as Factors (Level 2)'.  
Part of a broader unit on 'Factoring and Venn Factor Diagrams - Practice'

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<sup>1</sup>  $12 = 2^2 \cdot 3$

Is 12 a factor of both 60 and 84?

$$60 = 2^2 \cdot 3 \cdot 5$$

$$84 = 2^2 \cdot 3 \cdot 7$$

is 12 a factor of 60 and 84?

<b>a</b>	<b>b</b>
Yes	No

<sup>2</sup>  $175 = 5^2 \cdot 7$

Is 175 a factor of both 350 and 525?

$$350 = 2 \cdot 5^2 \cdot 7$$

$$525 = 3 \cdot 5^2 \cdot 7$$

is 175 a factor of 350 and 525?

<b>a</b>	<b>b</b>
Yes	No

<sup>3</sup>  $98 = 2 \cdot 7^2$

Is 98 a factor of both 210 and 1617?

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

$$1617 = 3 \cdot 7^2 \cdot 11$$

is 98 a factor of 210 and 1617?

<b>a</b>	<b>b</b>
Yes	No

<sup>4</sup>  $28 = 2^2 \cdot 7$

Is 28 a factor of both 84 and 140?

$$84 = 2^2 \cdot 3 \cdot 7$$

$$140 = 2^2 \cdot 5 \cdot 7$$

is 28 a factor of 84 and 140?

<b>a</b>	<b>b</b>
Yes	No

<sup>5</sup>  $28 = 2^2 \cdot 7$

Is 28 a factor of both 210 and 132?

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

$$132 = 2^2 \cdot 3 \cdot 11$$

is 28 a factor of 210 and 132?

<b>a</b>	<b>b</b>
Yes	No

<sup>6</sup>  $105 = 3 \cdot 5 \cdot 7$

Is 105 a factor of both 770 and 546?

$$770 = 2 \cdot 5 \cdot 7 \cdot 11$$

$$546 = 2 \cdot 3 \cdot 7 \cdot 13$$

is 105 a factor of 770 and 546?

<b>a</b>	<b>b</b>
Yes	No

<sup>7</sup>  $75 = 3 \cdot 5^2$

Is 75 a factor of both 150 and 525?

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

$$525 = 3 \cdot 5^2 \cdot 7$$

is 75 a factor of 150 and 525?

<b>a</b>	<b>b</b>
Yes	No