



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

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1
 $1225 = 5^2 \cdot 7^2$
 Is 1225 a factor of both 2450 and 3675?
 $2450 = 2 \cdot 5^2 \cdot 7^2$
 $3675 = 3 \cdot 5^2 \cdot 7^2$
 is 1225 a factor of 2450 and 3675?

a Yes	b No
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2
 $1715 = 5 \cdot 7^3$
 Is 1715 a factor of both 3430 and 5145?
 $3430 = 2 \cdot 5 \cdot 7^3$
 $5145 = 3 \cdot 5 \cdot 7^3$
 is 1715 a factor of 3430 and 5145?

a Yes	b No
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3
 $150 = 2 \cdot 3 \cdot 5^2$
 Is 150 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 150 a factor of 1050 and 1650?

a Yes	b No
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4
 $735 = 3 \cdot 5 \cdot 7^2$
 Is 735 a factor of both 2310 and 3822?
 $2310 = 2 \cdot 3 \cdot 5 \cdot 7 \cdot 11$
 $3822 = 2 \cdot 3 \cdot 7^2 \cdot 13$
 is 735 a factor of 2310 and 3822?

a Yes	b No
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5
 $525 = 3 \cdot 5^2 \cdot 7$
 Is 525 a factor of both 2310 and 1950?
 $2310 = 2 \cdot 3 \cdot 5 \cdot 7 \cdot 11$
 $1950 = 2 \cdot 3 \cdot 5^2 \cdot 13$
 is 525 a factor of 2310 and 1950?

a Yes	b No
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6
 $294 = 2 \cdot 3 \cdot 7^2$
 Is 294 a factor of both 5390 and 2730?
 $5390 = 2 \cdot 5 \cdot 7^2 \cdot 11$
 $2730 = 2 \cdot 3 \cdot 5 \cdot 7 \cdot 13$
 is 294 a factor of 5390 and 2730?

a Yes	b No
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7
 $294 = 2 \cdot 3 \cdot 7^2$
 Is 294 a factor of both 8085 and 9555?
 $8085 = 3 \cdot 5 \cdot 7^2 \cdot 11$
 $9555 = 3 \cdot 5 \cdot 7^2 \cdot 13$
 is 294 a factor of 8085 and 9555?

a Yes	b No
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