



Factors Highest Common Factors And Primes

Mana Maths

Te reo Māori terms



tauwehe

factor

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tauwehe pātahi

common factor

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**tauwehe pātahi
nui rawa**

highest common factor

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tau toitū

prime number

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Foundation

1. Write all the factors of 12.
2. Write all the factors of 18.
3. Write all the factors of 20.
4. Write all the factors of 24.
5. Is 4 a factor of 28?
6. Is 5 a factor of 27?
7. Is 6 a factor of 42?
8. Circle the factors of 15: 1, 2, 3, 5, 6, 15.
9. Circle the factors of 16: 1, 2, 4, 5, 8, 16.
10. List the common factors of 12 and 18.
11. List the common factors of 8 and 20.
12. Find the highest common factor of 12 and 18.

13. Find the highest common factor of 8 and 20.

14. Is 11 prime or composite?

15. Is 15 prime or composite?

16. Complete: the highest common factor of 9 and 12 is \square .

Proficient

1. Write all the factors of 30.
2. Write all the factors of 36.
3. Write all the factors of 45.
4. List the common factors of 18 and 24.
5. List the common factors of 20 and 30.
6. Find the highest common factor of 18 and 24.
7. Find the highest common factor of 20 and 30.
8. Find the highest common factor of 27 and 36.
9. Is 29 prime or composite?

10. Is 39 prime or composite?

11. Which is greater: the highest common factor of 18 and 24, or the highest common factor of 14 and 21?

12. Fill in the blank: the highest common factor of 16 and 24 is \square .

13. Fill in the blank: a common factor of 24 and 36 is \square .

14. Is 9 a factor of 45?

15. Is 7 a factor of 54?

16. A baker arranges 18 muffins and 24 cookies into equal groups with no leftovers. What is the greatest number of groups possible?

Excellence

1. A student says the highest common factor of 18 and 30 is 6. Are they correct? Explain.
2. A student says 21 is prime because it is odd. Are they correct? Explain.
3. Write the first 4 common factors of 24 and 36.
4. Find the highest common factor of 42 and 56.
5. Find the highest common factor of 48 and 60.
6. Find the highest common factor of 54 and 72.
7. Which numbers are prime: 17, 21, 23, 27, 31?
8. Fill in the blank: the highest common factor of a and 18 is 6 when $a = \square$.
9. Fill in both blanks: two common factors of 32 and 40 are \square and \square .

10. A teacher has 24 blue pens and 36 black pens. She wants identical packs with no pens left over. What is the greatest number of packs she can make?

11. A choir has 28 altos and 42 sopranos. They stand in equal rows with the same number of each voice in every row. What is the greatest number of rows?

12. Complete: if the highest common factor of 30 and n is 10, then one possible value of n is _____.