

WARM-UP

- HAVE YOUR BINDER OPENED TO YOUR HOMEWORK





Prime Number = Exactly 2 factors (1 and itself)

Composite Number = More than 2 factors

1 is neither prime nor composite.



Prime or Composite?

~~2~~, ~~3~~, ~~4~~, ~~5~~, ~~6~~, ~~7~~, ~~8~~, ~~9~~, 10, 11

Prime

2, 3, 5, 7, 11

Composite

4, 6, 8, 9, 10

Is each number prime or composite? Do on your own

~~12~~ ~~13~~ ~~15~~ ~~17~~ ~~21~~ 23

~~X~~ ~~X~~ ~~X~~ ~~X~~ ~~X~~

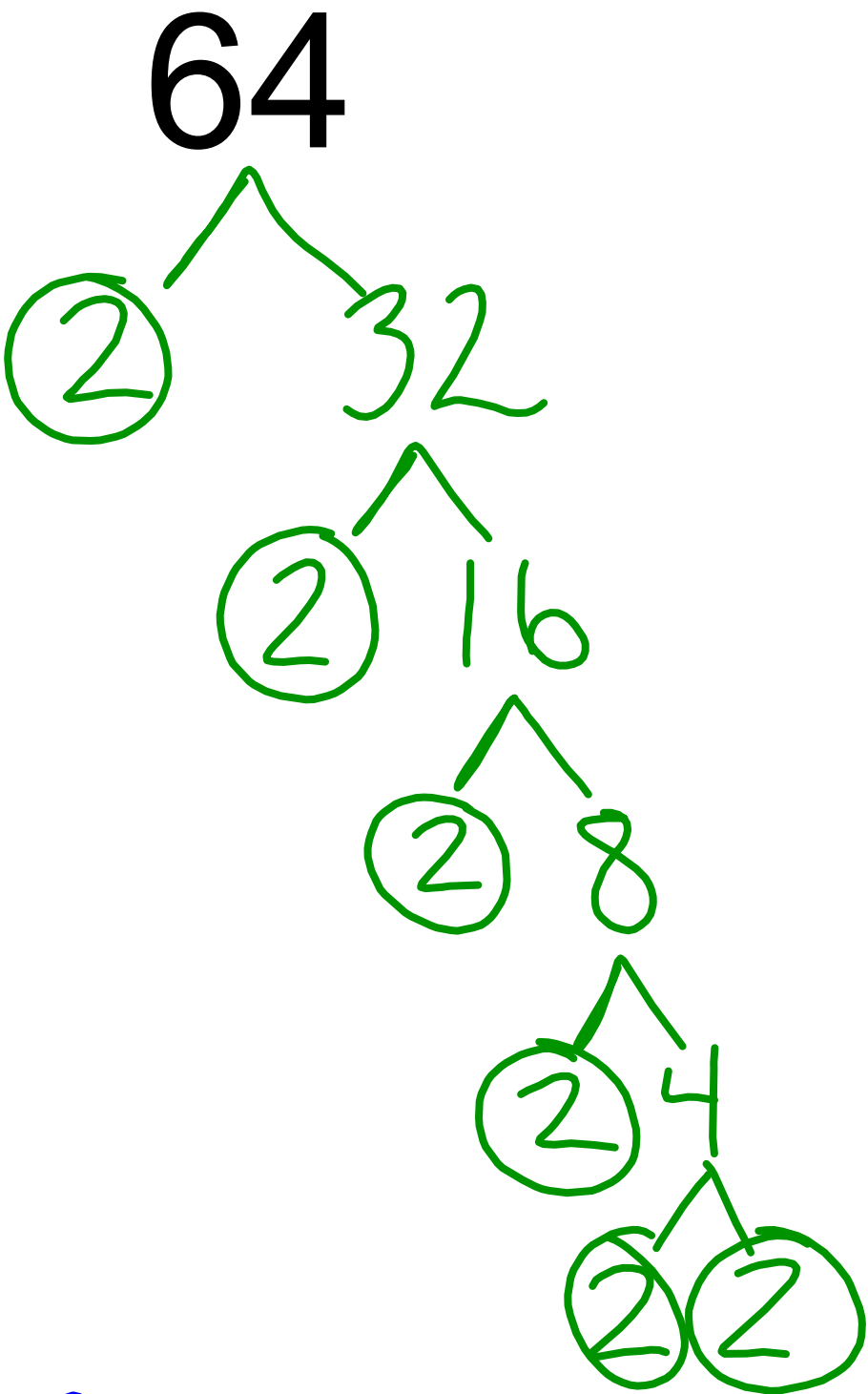
Prime

13, 17, 23

Composite

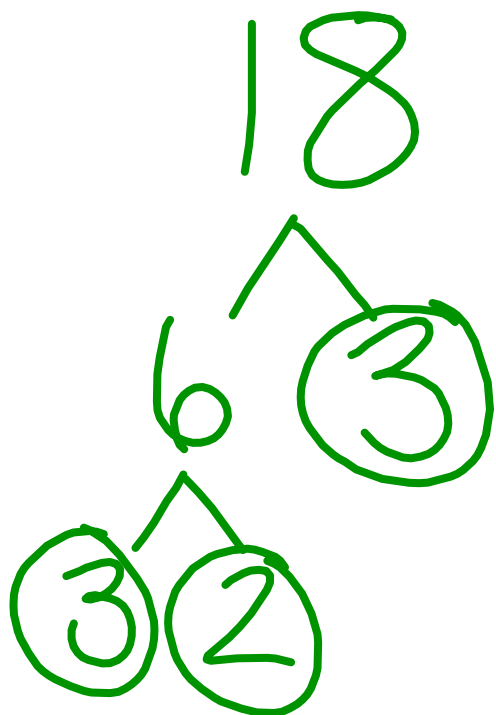
12, 15, 21

A factor tree breaks a number into factors until ALL branches end in prime numbers.



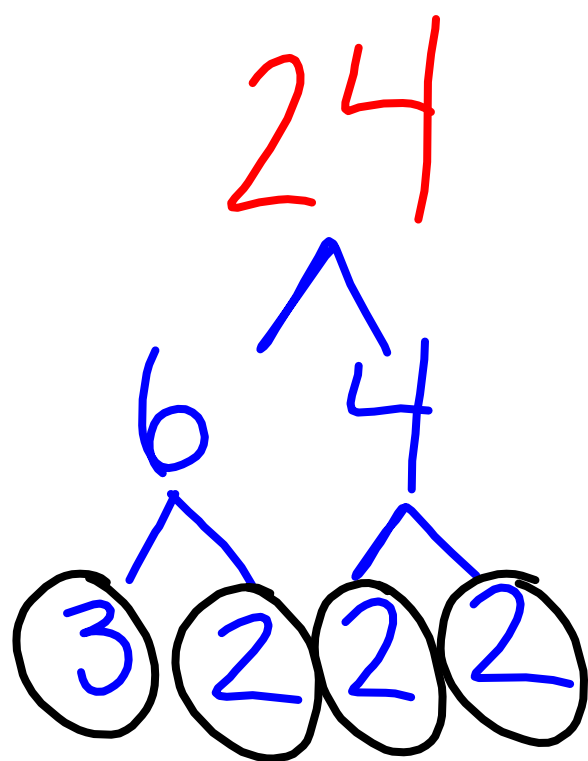
☆ $2 \times 2 \times 2 \times 2 \times 2 \times 2$

Find the prime factors of 18



$$3 \times 3 \times 2$$

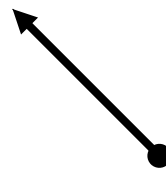
Find the prime factorization of 24



$$3 \times 2 \times 2 \times 2$$

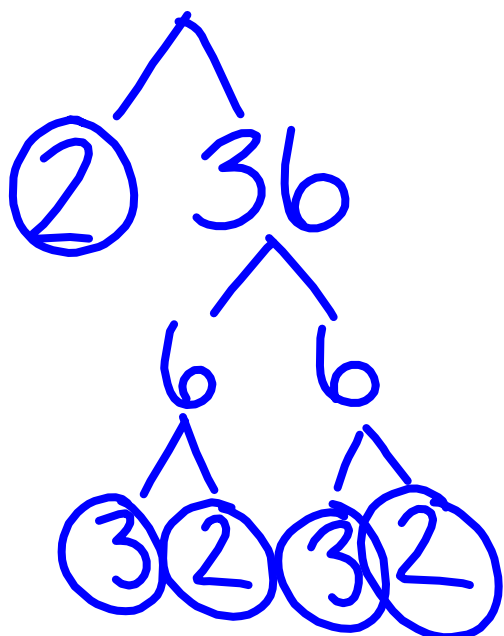
NOTE:

ALL of the prime factors can be multiplied together to get the given number



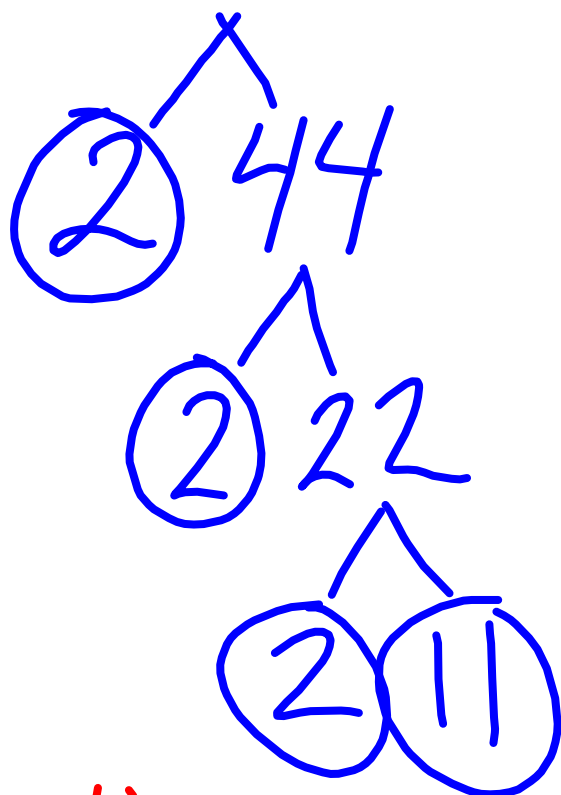
So, we're going to start writing
our answers differently

72



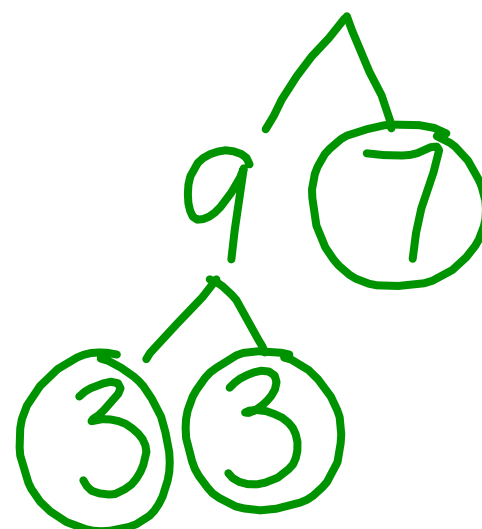
$$2 \times 3 \times 2 \times 3 \times 2$$

88



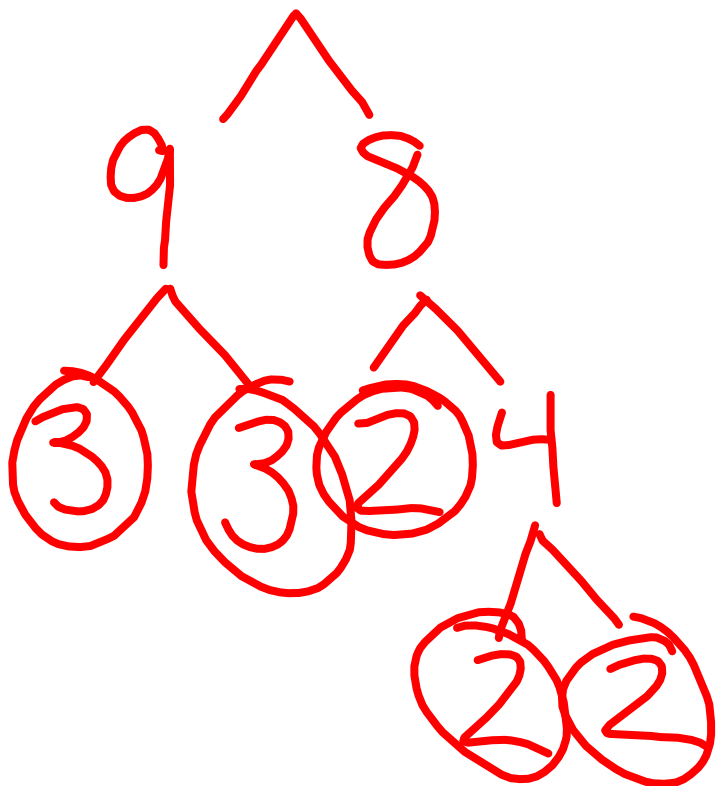
$$11 \times 2 \times 2 \times 2$$

63



$$3 \times 3 \times 7$$

72



YOU TRY

A) 32

B) 84

Worksheet:

~~Exit slip?~~

Homework