

Vocabulary

What is a factor? Two or more numbers or algebraic expressions that when multiplied together, produce a product.

What does it mean when a number is prime?

Has only 2 factors, 1 and itself.

What does it mean when a number is composite?

Has more than 2 factors.

Factors

Find the factors for each number. State whether the number is prime or composite.

1) 24

1 * 24
2 * 12
3 * 8
4 * 6

Composite!

1, 2, 3, 4, 6, 8, 12, 24

2) 31

1 * 31

Prime!

1, 31

3) 45

4) 30

5) 36

1 * 36
2 * 18
3 * 12
4 * 9
6 * 6

Composite!

1, 2, 3, 4, 6, 9, 12, 18, 36

6) 17

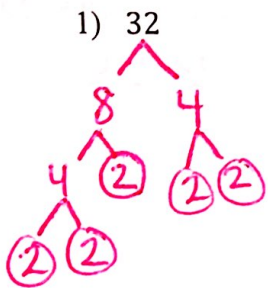
7) 51

8) 100

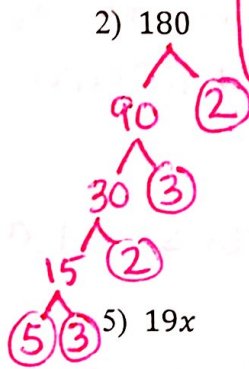
Prime and Composite Numbers

Determine whether the number is prime or composite. If the number is composite, write its prime factorization.

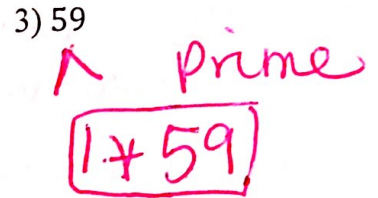
Examples:



Composite
 2^5



Composite
 $2^2 \cdot 3^2 \cdot 5$



4) $28xy^3$

5) $19x$

6) 1

7) 630

8) 175

9) $3x^3y^2$

10) $28b^5c$



$2^2 \cdot 7 \cdot b^5 \cdot c$

Extra Practice: Factor Towers and Dragons Worksheet

Modified: Factor Towers Worksheet (Towers Only) and Dragons Worksheet #2 - 12 (evens)