

Unit 6 Prime Numbers

1. Numbers being multiplied are called **factors** (example: 3 and 4 are factors of 12).
2. A **prime number** is a number greater than 1 that has only 1 and itself as factors.

Prime numbers include

2, 3, 5, 7, 11, 13, 17, 19, 23, etc.

3. Numbers that are not prime are **composite numbers**.

Composite numbers include

4, 6, 8, 9, 10, 12, 14, 15, 16, 18, etc.

4. **Prime factors of a composite number** are the prime numbers that can be multiplied to equal the number. The prime factors can be found by dividing the number by the **lowest possible prime number** that will divide evenly.

Number	8	20	30
	(2)(4)	(2)(10)	(2)(15)
	(2)(2)(2)	(2)(2)(5)	(2)(3)(5)
Prime Factors	2	2 and 5	2, 3, and 5

5. **All factors of a composite number** are all the numbers that can be multiplied to equal the number. All the factors can be found by dividing the number by the **lowest possible number** that will divide evenly.

Number	8	39
	(1)(8)	(1)(39)
	(2)(4)	(3)(13)
Factors	1, 2, 4, and 8	1, 3, 13, and 39

6. The number one is neither prime or composite. It is called the **unit number**.

Unit 6 Practice Problems

1) Which of these numbers is not a factor of 75? A) 25 B) 15 C) 10 D) 5	Answer _____
2) Which of these numbers is a prime number? A) 14 B) 15 C) 16 D) 17	Answer _____
3) Which of these numbers is a composite number? A) 13 B) 11 C) 9 D) 7	Answer _____
4) List all factors of 48.	5) List all the prime factors of 60.

Unit 6 answers are on page 237.
Unit 6 additional practice problems are on page 161.