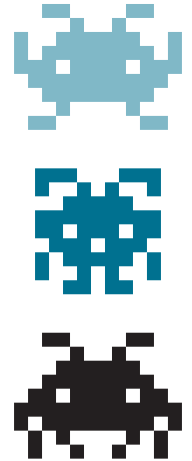


Greatest Common Factor Part 1

The greatest common factor (GCF) is the largest factor that divides two numbers.

EXAMPLE: Find the greatest common factor of 6 and 10.

Step 1	Step 2	ANSWER
Find the prime factors of each number. $6 = 2 \times 3$ $10 = 2 \times 5$	Find the common prime factors that 6 and 10 have. $6 = 2 \times 3$ $10 = 2 \times 5$	The great common factor of 6 and 10 is 2 .



PART 1. Circle the common factors of the pair of numbers, then answer the questions.

$4 = 2 \times 2$ $6 = 2 \times 3$ The common prime factor is <u>2</u> . The greatest common factor (GCF) is <u>2</u> .	EXAMPLE	$6 = 2 \times 3$ $9 = 3 \times 3$ The common prime factor is <u>3</u> . The greatest common factor (GCF) is <u>3</u> .
$10 = 2 \times 5$ $12 = 2 \times 2 \times 3$ The common prime factor is <u>2</u> . The greatest common factor (GCF) is <u>2</u> .		$14 = 2 \times 7$ $35 = 5 \times 7$ The common prime factor is <u>7</u> . The greatest common factor (GCF) is <u>7</u> .

PART 2. Greatest common factor can also be found by multiplying all the common prime factors.

$18 = 2 \times 3 \times 3$ $12 = 2 \times 2 \times 3$ The common prime factors are <u>2 and 3</u> . The greatest common factor (GCF) is <u>$2 \times 3 = 6$</u> .	EXAMPLE	$20 = 2 \times 2 \times 5$ $30 = 2 \times 3 \times 5$ The common prime factors are <u>2 and 5</u> . The greatest common factor (GCF) is <u>$2 \times 5 = 10$</u> .
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