

Sept 10

Warm-up

Practice

~~You may use a calculator for these problems.~~

1. List the first 10 multiples of each number.

a) 2 b) 5 c) 8 d) 7

(a) 2 - 2, 4, 6, 8, 10, 12, 14, 16, 18, 20

(b) 5 - 5, 10, 15, 20, 25, 30, 35, 40, 45, 50

(c) 8 - 8, 16, 24, 32, 40, 48, 56, 64, 72, 80

(d) 7 - 7, 14, 21, 28, 35, 42, 49, 56, 63, 70

2. List the first 6 multiples of each number.

a) 12 b) 11 c) 16 d) 15

(a) 12 - 12, 24, 36, 48, 60, 72

(b) 11 - 11, 22, 33, 44, 55, 66

(c) 16 - 16, 32, 48, 64, 80, 96

(d) 15 - 15, 30, 45, 60, 75, 90

Let's review.....

What is a multiple????

List the first 10 multiples of 4

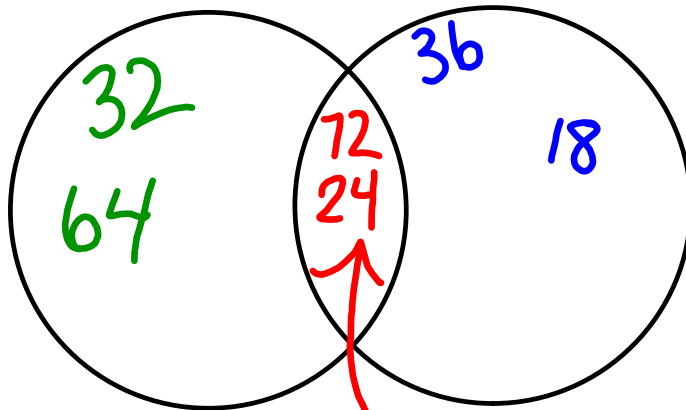
4 - 4, 8, 12, 16, 20, 24, 32, 36, 40

Sort these numbers in the Venn diagram:

~~72~~, ~~36~~, ~~24~~, ~~18~~, ~~32~~, ~~64~~ ✓
 8 - 8, 16, 24, 32, 40, 48, 56, 64, 72, 80 ✓
 6 - 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66, 72 ✓

Multiples of 8

Multiples of 6



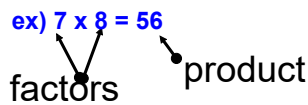
common multiples

Prime & Composite Numbers

Definitions

Product - answer to a **multiplication** problem

- Factor - a number that is multiplied by another to give a product.
 - a number that divides evenly into another number



- Prime Number - a number that has only two factors, itself and 1.

Example: 7 is **prime** because the only numbers that will divide into it evenly are 1 and 7.

First few prime numbers

2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37...

- Composite number - a number that has more than two factors.

ex) 8 is a composite number

$$1 \times 8 = 8$$

$$2 \times 4 = 8$$

so 8 has the factors 1, 2, 4, 8

List the factors of 48:

48

$$\begin{aligned} \checkmark 1 \times 48 &= 48 \\ \checkmark 2 \times 24 &= 48 \\ \checkmark 3 \times 16 &= 48 \\ \checkmark 4 \times 12 &= 48 \\ \checkmark 6 \times 8 &= 48 \end{aligned}$$

Factors of 48:

1, 2, 3, 4, 6, 8, 12, 16, 24, 48

Which numbers below are multiples of 6?

What strategy did you use to find out?

36 70 66 42 54 27 120 81

Which of the numbers 21, 24, 45, 30, 42, 60, and 84 are multiples of:

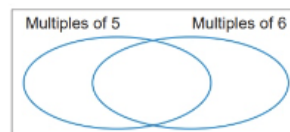
a) 3? b) 12? c) 7? d) 15?

Make a large copy of this Venn diagram.

Sort these numbers.

45, 24, 52, 30, 66, 15, 85, 90, 72, 60, 20, 38

What can you say about the numbers in the overlap?



List all the factors of each number.

a) 6 b) 9 c) 25 d) 30 e) 12
f) 50 g) 28 h) 98 i) 20 j) 63

a) Name a prime number.

Explain how you know it is a prime number.

b) Name a composite number.

Explain how you know it is a composite number.

Which numbers below are factors of 80?

How do you know?

a) 2 b) 3 c) 4 d) 5
e) 6 f) 8 g) 9 h) 10

