GREATEST COMMON FACTOR & REDUCING FRACTIONS
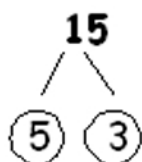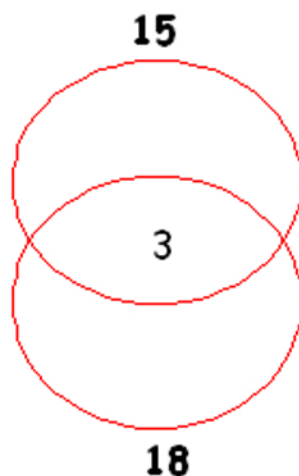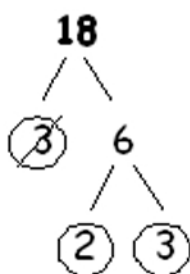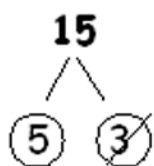
Example 1: Reduce $\dfrac{15}{18}$ lowest terms.

Step 1: Create factor trees for both the numerator and denominator. Circle all prime factors.

$$15$$
$$5 \quad 3$$

$$18$$
$$3 \quad 6$$
$$2 \quad 3$$
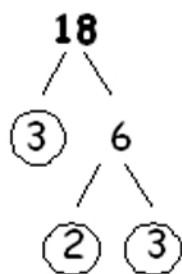
Step 2: Place each prime factor that both numbers have in common in the center part of this Double Venn Diagram.

$$15$$
$$5 \quad 3$$

$$18$$
$$3 \quad 6$$
$$2 \quad 3$$

15

3

18

Step 3: Place the remaining PRIME factors for the 15 in the top part of the Venn Diagram and the remaining PRIME factors for the 18 in the bottom part of the Venn.

$$15$$
$$5 \quad 3$$

$$18$$
$$3 \quad 6$$
$$2 \quad 3$$

15

5

3

2 3

18