Denominators of Tenths and Hundredths - Guided Lesson Explanation

Explanation to #1

The denominator that is the same in both fractions is called the common denominator. A common denominator must be used in order to add fractions. When fractions are added, they must refer to the same whole. We can add fractions with denominator of 10 and 100.

First we took L.C.M of10 and 100. The L.C.M of them is 100.

Now we will divide 100 by 10 and 100 by 100 as 100 is the L.C.M.

We will get 10 by dividing 100 by 10, then whatever the answer will come, we have to multiply it by 4 the numerator. The number comes 40.

We will get 1 by dividing 100 by 100. Then whatever the answer will come, we have to multiply it by 30 the numerator. The number comes 30.

Now add both of the fractions.

$$\frac{40 + 30}{100} = \frac{70}{100}$$

Explanation to #2

Cross multiplying works because we are really just multiplying both sides of the equation by 1. Since multiplying anything by 1 doesn't change its value, we will have an equivalent equation.

$$\frac{5}{10} \diagup\kern-1.2em\diagdown \frac{x}{100}$$

$$10 \times x = 100 \times 5$$

$$10x = 500$$

$$x = \frac{500}{10}$$

$$x = 50$$

So the value of x is 50.

Explanation to #3

Cross multiplying works because we are really just multiplying both sides of the equation by 1. Since multiplying anything by 1 doesn't change its value, we will have an equivalent equation.

Now cross multiply the numerator and denominator.

$$\frac{x}{100} = \frac{8}{10}$$

$$\frac{x}{100} \diagdown \frac{8}{10}$$

$$10 \times x = 100 \times 8$$

$$10x = 800$$

$$x = \frac{800}{10}$$

$$x = 80$$

So the value of x is 80.