Products of Fractions and Whole Number in Word Problems - Guided Lesson Explanation

Explanation to #1

Multiplying a fraction by an integer follows the same rules as multiplying two fractions. An integer can be considered to be a fraction with a denominator of 1. Therefore, when a fraction is multiplied by an integer, the numerator of the fraction is multiplied by the integer. The denominator is multiplied by 1 which does not change the denominator.

The coupon would cut 4/8 of the total. The math would look like this:

$$\frac{4}{8} \quad X \quad 200 \quad = \quad \$100$$

Explanation to #2

Following the same frame of mind, we would multiply the total amount of sugar by $\frac{2}{3}$ to find the amount that is left.

$$\frac{2}{3} \quad X \quad 6 = \quad 4 \text{ kg}$$

Explanation to #3

Once again, we multiply the total books by the fraction that was removed.

$$\frac{5}{10} \quad X \quad 10 \quad = \quad 5 \text{ books}$$