

Week 10 Math 150

Problem of the Week

Divide 153 into two parts such that $\frac{3}{5}$ of one part is equal to $\frac{6}{7}$ of the other part.

Let $x = 1^{\text{st}}$ part & $153 - x = 2^{\text{nd}}$ part

$$\cancel{7} \cancel{35} \cdot \frac{3}{5} x = \frac{6}{\cancel{7}} (153 - x) \cancel{35} \cancel{5}$$

$$21x = 30(153 - x)$$

$$\begin{array}{r} 21x = 4590 - \cancel{30x} \\ +30x \qquad \qquad +30x \end{array}$$

$$51x = 4590$$

$$x = 90$$

90 and 63