

Worked Example

Andrew, Bill, and Carmen invest in a corporation in the ratio of 2:7:6, respectively. The corporation makes a profit of \$57,000. If the profit is to be divided proportionally, how much should each person receive?

$$2x = \text{amount Andrew receives (\$)}$$

$$7x = \text{amount Bill receives (\$)}$$

$$6x = \text{amount Carmen receives (\$)}$$

$$2x + 7x + 6x = 57000$$

$$15x = 57000$$

$$x = 3800$$

The amounts each receive are:

$$\text{Andrew: } 2 \cdot 3800 = \$7,600$$

$$\text{Bill: } 7 \cdot 3800 = \$26,600$$

$$\text{Carmen: } 6 \cdot 3800 = \$22,800$$

Check:

$$7600 + 26600 + 22800 = 57,000$$

Note that all the following ratios are equivalent:

$$2:7:6$$

$$4:14:12$$

$$10:35:30$$

$$200:700:600$$

$$2x:7x:6x$$

Andrew, Bill, +
Carmen will
receive a multiple
of 2, 7, + 6,
respectively.