

Video Game Company

The percentage of \$195 750 that each partner contributed:

$$\text{Jae Eun} \quad \frac{\$87\,750}{\$195\,750} \times 100 = 44.8\%$$

$$\text{Ted} \quad \frac{\$108\,000}{\$195\,750} \times 100 = 55.2\%$$

Therefore, Jae Eun should receive 45% (or 44.8%) of the sale price, while Ted should receive 55% (or 55.2%).

Jae Eun: $\$750\,000 \times 0.45 = \$337\,500$ (or $\$336\,000$ using decimal %)

Ted: $\$750\,000 \times 0.55 = \$412\,500$ (or $\$414\,000$ using decimal %)

Solution 2

This solution is based on splitting the profit of the sale after deducting the partners' contributions.

The same initial calculations as in Solution 1:

Jae Eun: $\$50\,000 + \$8\,500 = \$58\,500$

$\$58\,500 \times 1.5 = \$87\,750$ (Jae Eun's initial contribution weighted at 1.5x)

Ted: $\$22\,000 \times 1.5 = \$33\,000$ (Ted's initial contribution weighted at 1.5x)

Ted continued to contribute \$1250/month for 5 years.

$\$1250 \times 5 \text{ years} \times 12 \text{ months/year} = \$75\,000$

In total, Ted invested: $\$33\,000 + \$75\,000 = \$108\,000$

Total Partner contributions: $\$87\,750 + \$108\,000 = \$195\,750$

Sale price of Company less Total Partner contributions: $\$750\,000 - \$195\,750 = \$554\,250$

Profit split equally: $\$554\,250 \div 2 = \$277\,125$ for each partner

Therefore:

Jae Eun: $\$87\,750 + \$277\,125 = \$364\,875$

Ted: $\$108\,000 + \$277\,125 = \$385\,125$