

**4-4****Real-Life Career Activity****Office Administrator**

Office administrators are multi-talented workers responsible for many office tasks. Some of these responsibilities include supervising clerical staff, maintaining databases, receiving and sending bills, scheduling appointments, organizing meetings, and working with the company's budget.

Suppose the company's marketing manager needs to hire a printer to make some advertising packets. The printer quotes \$2 for each packet and a one-time fee of \$2,000 to design the materials. The budget for these materials is \$8,000. How many packets can the office administrator order for \$8,000? The administrator can write an equation to solve this problem using  $p$  for the number of packets.

$$8,000 = 2,000 + 2p$$

The administrator solves this two-step equation.

$$8,000 = 2,000 + 2p$$

$$8,000 - 2,000 = 2,000 - 2,000 + 2p$$

$$6,000 = 2p$$

$$\frac{6,000}{2} = \frac{2p}{2}$$

$$3,000 = p$$

The administrator calculates that the company can order 3,000 packets for \$8,000.

**Solve.**

1. Calculate how many packets the administrator can order for \$8,000 if each packet costs \$3 and the design fee is \$2,000.
2. Calculate how many packets the administrator can order for \$5,000 if each packet costs \$5 and the design fee is \$1,000.
3. Suppose each packet costs \$7 and the design fee is \$3,000. The marketing manager wants 1,000 packets but the administrator has only \$8,000 to spend. Does the administrator have enough money in the budget?