

Exercise 6-9 (20 minutes)

1. The overall contribution margin ratio can be computed as follows:

$$\begin{aligned}\text{Overall CM ratio} &= \frac{\text{Total contribution margin}}{\text{Total sales}} \\ &= \frac{\$30,000}{\$100,000} = 30\%\end{aligned}$$

2. The overall break-even point in sales dollars can be computed as follows:

$$\begin{aligned}\text{Overall break-even} &= \frac{\text{Total fixed expenses}}{\text{Overall CM ratio}} \\ &= \frac{\$24,000}{30\%} = \$80,000\end{aligned}$$

3. To construct the required income statement, we must first determine the relative sales mix for the two products:

	<i>Claimjumper</i>	<i>Makeover</i>	<i>Total</i>
Original dollar sales	\$30,000	\$70,000	\$100,000
Percent of total	30%	70%	100%
Sales at break-even	\$24,000	\$56,000	\$80,000

	<i>Claimjumper</i>	<i>Makeover</i>	<i>Total</i>
Sales	\$24,000	\$56,000	\$80,000
Variable expenses*	<u>16,000</u>	<u>40,000</u>	<u>56,000</u>
Contribution margin	<u>\$ 8,000</u>	<u>\$16,000</u>	24,000
Fixed expenses.....			<u>24,000</u>
Net operating income.....			<u>\$ 0</u>

- *Claimjumper variable expenses: $(\$24,000/\$30,000) \times \$20,000 = \$16,000$
 Makeover variable expenses: $(\$56,000/\$70,000) \times \$50,000 = \$40,000$