

## **SOLUTIONS - Walk Rite Shoe Company**

1. In number of pairs:

$$\frac{\text{Fixed costs}}{\text{Contribution margin per pair}} = \frac{\$360,000}{\$9.00} = 40,000 \text{ pairs}$$

In revenues: 40,000 pairs x \$30 = \$1,200,000

2. Revenues, \$30 × 35,000	\$1,050,000
Variable costs, \$21 × 35,000	<u>735,000</u>
Contribution margin	315,000
Fixed costs	<u>360,000</u>
Operating income (loss)	<u>\$ (45,000)</u>

An alternative approach is that 35,000 units is 5,000 units below the breakeven point, and the unit contribution margin is \$9.00:

$$\$9.00 \times 5,000 = \$45,000 \text{ below the breakeven point}$$

3. Fixed costs: \$360,000 + \$81,000 = \$441,000  
Contribution margin per pair = \$10.50

a. Breakeven point in units =  $\frac{\$441,000}{\$10.50} = 42,000 \text{ pairs}$

b. Breakeven point in revenues = \$30 × 42,000 = \$1,260,000

4. Fixed costs = \$360,000  
Contribution margin per pair = \$8.70

a. Breakeven point in units =  $\frac{\$360,000}{\$8.70} = 41,380 \text{ pairs (rounded up)}$

b. Breakeven point in revenues = \$30 × 41,380 = \$1,241,400

5. Breakeven point = 40,000 pairs  
Store manager receives commission on 10,000 pairs.  
Cost of commission = \$0.30 × 10,000 = \$3,000

Revenues, \$30 × 50,000		\$1,500,000
Variable costs:		
Cost of shoes	\$975,000	
Salespeople commission	75,000	
Manager commission	<u>3,000</u>	<u>1,053,000</u>
Contribution margin		447,000
Fixed costs		<u>360,000</u>
Operating income		<u>\$ 87,000</u>

An alternative approach is 10,000 units × \$8.70 = \$87,000