

Exercise 6-17 (30 minutes)

1.

| | <u>Flight Dynamic</u> | | <u>Sure Shot</u> | | <u>Total Company</u> | |
|------------------------------|-----------------------|-----------|------------------|-----------|----------------------|--------------|
| | <u>Amount</u> | <u>%</u> | <u>Amount</u> | <u>%</u> | <u>Amount</u> | <u>%</u> |
| Sales | P150,000 | 100 | P250,000 | 100 | P400,000 | 100.0 |
| Variable ex- penses..... | <u>30,000</u> | <u>20</u> | <u>160,000</u> | <u>64</u> | <u>190,000</u> | <u>47.5</u> |
| Contribution margin..... | <u>P120,000</u> | <u>80</u> | <u>P 90,000</u> | <u>36</u> | 210,000 | <u>52.5*</u> |
| Fixed expenses... | | | | | <u>183,750</u> | |
| Net operating income..... | | | | | <u>P 26,250</u> | |

*P210,000 ÷ P400,000 = 52.5%.

2. The break-even point for the company as a whole would be:

$$\begin{aligned} \text{Break-even point in} &= \frac{\text{Fixed expenses}}{\text{Overall CM ratio}} \\ \text{total dollar sales} &= \frac{P183,750}{0.525} = P350,000 \end{aligned}$$

3. The additional contribution margin from the additional sales would be computed as follows:

$$P100,000 \times 52.5\% \text{ CM ratio} = P52,500$$

Assuming no change in fixed expenses, all of this additional contribution margin of P52,500 should drop to the bottom line as increased net operating income.

This answer assumes no change in selling prices, variable costs per unit, fixed expense, or sales mix.