



Worksheet 11: Use of formulae answers

1 What is the return on capital employed (ROCE)?

C 9.3%

Formula

$$\text{Return on capital employed (\%)} = \frac{\text{Profit from operations}}{\text{Capital employed}} \times 100$$

Capital employed = issued shares + reserves + non-current liabilities

$$\text{Return on capital employed (\%)} = \frac{14\,000 \times 100}{150\,000} = 9.3\%$$

2 What was the non-current asset turnover?

D 2 times

$$\text{Non-current asset turnover (times)} = \frac{\text{Not revenue}}{\text{Total net book value of non-current assets}}$$

$$\text{Non-current asset turnover (times)} = \frac{390\,000}{195\,000} = 2 \text{ times}$$

3 What was the monthly fixed overhead cost?

D \$150 000

High and Low Method to work put variable cost per unit =

$$\frac{\text{Fixed cost at higher activity} - \text{Fixed cost at lower activity}}{\text{Higher activity} - \text{Lower activity}}$$

Total Fixed Cost = Total Overheads – (activity × variable cost per activity)

(Note – can use any activity level either higher or lower)

$$\text{High and Low Method to work put variable cost per unit} = \frac{1\,062\,000 - 918\,000}{76\,000 - 64\,000} = \$12 \text{ per activity}$$

$$\text{Total Fixed Cost} = \$1\,062\,000 - (76\,000 \times \$12) = \$150\,000$$



4 How many units must be sold to achieve the same profit next year?

D 13 000

Level of output or sales to achieve a target profit =

$$\frac{\text{Fixed costs + targeted profit}}{\text{(Selling Price per unit – variable cost per unit)}} \quad \text{OR} \quad \frac{\text{Fixed cost + target profit}}{\text{Contribution per unit}}$$

$$\text{Level of output or sales to achieve a target profit} = \frac{\$84\,000 + \$20\,000}{\$25 - \$17} = 13\,000$$