



## Worksheet 4: Formulae answers

Calculation	Formulae
Added value =	$Price - Total\ costs$ <b>OR</b> $Price - cost\ of\ goods\ sold$
Sales growth =	$\frac{Original\ sales - new\ sales}{Original\ sales} \times 100$
Labour turnover =	$\frac{Number\ of\ workers\ who\ left}{Total/average\ number\ of\ workers\ sales} \times 100$
Time-based salary =	$Rate\ of\ pay \times hours\ worked$
Piece-rates =	$Units\ produced \times rate\ per\ unit$
Commission =	$Sales\ revenue \times commission\ rate\ (e.g.\ 25\%)$
Profit share =	$Total\ profit \times share\ of\ profit$
Market share =	$\frac{Business\ sales\ revenue}{Total\ market\ revenue} \times 100$ <b>OR</b> $\frac{Units\ sold\ by\ business}{Total\ market\ units\ sold} \times 100$
Market growth =	$\frac{New\ market\ size - Original\ market\ size}{Original\ market\ size} \times 100$
Labour productivity =	$\frac{Output\ produced}{Number\ of\ workers\ (per\ worker)}$ <b>OR</b> $\frac{Output\ produced}{Hours\ worked\ (per\ hour)}$
Re-order time =	$(Average\ daily\ sales \times lead\ time) + minimum\ stock$
Lead time =	$Order\ delivery\ date - order\ request\ date$
Capacity utilisation =	$\frac{Current\ capacity}{Total\ capacity} \times 100$
Profit =	$Price - Total\ costs\ (per\ unit)$ <b>OR</b> $Total\ revenue - total\ costs\ (total)$
Working capital =	$Current\ assets - current\ liabilities$
Opening cash flow =	$Closing\ cash\ flow - net\ cash\ flow$



Calculation	Formulae
Closing cash flow =	$Opening\ cash\ flow + net\ cash\ flow$
Net cash flow =	$Cash\ flow\ in - cash\ flow\ out$
Total variable costs =	$Variable\ costs\ per\ unit \times output$
Average fixed costs =	$\frac{Total\ fixed\ costs}{Output}$
Contribution =	$Price - Variable\ costs\ per\ unit\ (per\ unit)$ <b>OR</b> $Revenue - total\ variable\ costs\ (total)$
Average total cost =	$\frac{Total\ costs}{Output}$
Marginal cost =	$\frac{Change\ in\ cost}{Change\ in\ output}$
Total cost =	$Total\ variable\ costs + total\ fixed\ costs$ <b>OR</b> $(Variable\ cost\ per\ unit \times output) + fixed\ costs$
Break-even level of output =	$Fixed\ costs$ $Contribution$ <b>OR</b> $\frac{Fixed\ costs}{(Price - variable\ cost\ per\ unit)}$
Margin of safety =	$Current\ level\ of\ output - break\text{-}even\ level\ of\ output$
Adverse budget variance =	$Actual\ cost - budgeted\ cost$
Favourable budget variance =	$Actual\ cost - budgeted\ cost$