



## Worksheet 9: Marking analysis answers

1 The new cost of the machine will be:

$$(\$300\,000/120\%) \times 130\% = \$325\,000 \text{ (1), increase in cost of } \$25\,000 \text{ (1)}$$

Payback period will now be:

$$\$325\,000 - (\$60\,000 + \$100\,000 + 130\,000) = \$35\,000$$

$$(\$35\,000/\$110\,000) \times 365 = 117 \text{ days}$$

$$3 \text{ years } 117 \text{ days (1) OR } - 3 \text{ years } 34 \text{ days} = 83 \text{ more days to payback (1)}$$

Accounting rate of return (ARR) will now be:

$$\$75\,000/4 = \$18\,750$$

$$\text{ARR} = (\$18\,750/\$162\,500) \times 100 = 11.54\% \text{ (1) OR ARR has declined (1)}$$

Net present value (NPV) will be:

$$\$9900 - \$25\,000 = (\$15\,100) \text{ (1) OR change from positive NPV to negative NPV (1)}$$

The increase in import duty will affect the decision, meaning that Z Limited should not purchase the machine to manufacture the new product **(1)** mainly due to a negative NPV **(1)**

Accept other valid responses.