



$$(i) A_1 = 1000 \times 1.06 - 72 \\ = \$988.$$

$$(ii) A_2 = \left(\overset{1000}{\cancel{10000}} \times 1.06 - 72 \right) 1.06 - 72 \\ = \left(\overset{988}{\cancel{9880}} \times 1.06 - 72 \times 1.06 \right) - 72 \\ = \$961.7968.$$

$$B_n = 1200 - 200 \times 1.06^n$$

$$(iii) B_{10} = 1200 - 200 \times (1.06)^{10} \\ = \$841.8304607$$

$$= \cancel{841.8304607} \times 1.06^n - R \left(\frac{1 - 1.06^n}{1 - 1.06} \right)$$

A_n



(b) $15 \text{ ms}^{-1} \rightarrow$ bus, $8 \text{ km} \rightarrow$ 2000 m to travel.

$4 \text{ ms}^{-1} \rightarrow$ Claire,