

Quiz 14

$$\boxed{1} \quad a_1 = \frac{4-12}{1} = -8, \quad a_2 = \frac{8+12}{2} = 10$$
$$a_3 = 0, \quad a_4 = \frac{16+12}{4} = 7$$

$\boxed{2}$ Not monotone $a_1 \nearrow a_2 \searrow a_3$

$$\boxed{3} \quad a_n = 4 + \frac{12(-1)^n}{n} \leq 16$$
$$-8 \leq$$

$$\boxed{4} \quad \lim_{n \rightarrow \infty} a_n = 4.$$