

Antw. 1.

$$a. \quad \frac{u_7}{u_4} = r^3 = \frac{210}{1680} = \frac{1}{8}$$

de reden is: $r = \frac{1}{2}$

$$b. \quad u_4 = b \cdot r^3 = b \cdot \left(\frac{1}{2}\right)^3 = 1680$$
$$b = 13440 \rightarrow u_1 = 13440$$

Antw. 2.

$$a. \quad u_7 = b + 6 \cdot a$$

$$u_3 = b + 2 \cdot a$$

$$u_7 - u_3 = 4 \cdot a = 200 \rightarrow a = 50$$

$$\text{Dus } u_n = 50 + u_{n-1}$$

$$b. \quad u_1 = 100$$

Antw. 3.

$$u_{13} = 40, \quad u_{37} = 112, \quad n = 25$$

$$\sum_{n=13}^{37} u_n = \frac{1}{2} \cdot 25 \cdot (40 + 112) = 1900$$

Antw. 4.

$$u_4 \times u_5 \times u_6 = (2 \cdot r^3) \cdot (2 \cdot r^4) \cdot (2 \cdot r^5) = 8 \cdot r^{12}$$

$$8 \cdot r^{12} = 4251528$$

$$r^{12} = 531441 \rightarrow r = (531441)^{\frac{1}{12}} = 3$$