

4218 a)

$$S_n = \frac{a_1 (k^n - 1)}{k - 1}$$

$$a_1 = 10 \cdot 1,02^0 = 10 \cdot 1,02 \text{ dtsa. } n = 13 + 1 = 14$$

$$= \frac{10 (1,02^{14} - 1)}{1,02 - 1}$$

$$\approx 159,7$$

$$\approx 160$$

$$\text{oder } \frac{10}{0,02} \times (1,02^{14} - 1)$$

$$500 \times (1,02^{14} - 1)$$

$$\approx 159,7$$

$$\approx 160$$

$$n = \frac{\lg\left(\frac{a_n}{a_1}\right) + 1}{\lg k}$$

$$= \frac{\lg\left(\frac{512}{4}\right) + 1}{\lg 2}$$

$$= 8$$

Eller med räknaren

$$4 \times 2^{(x-1)}$$

OBS: när  $x = 1$   $2^{(x-1)} = 2^0 = 1$

$x$	$y$
1	4
2	8
3	16
4	↓
5	↓
6	↓
7	↓
8	512

Dvs  $n = 8$