

- 21 The number of gannets on an island is assumed to follow this exponential growth model.

$$N = 0.45 \times 1.07^x$$

N is the number of gannets, in thousands.

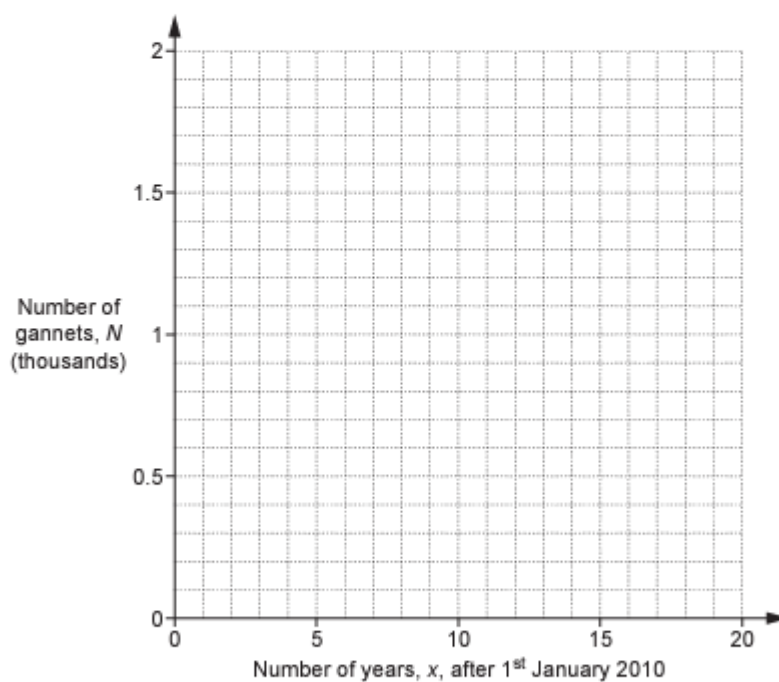
x is the number of years after 1st January 2010.

- (a) Complete the table for $N = 0.45 \times 1.07^x$.

x	0	5	10	15	20
N	0.45	0.63		1.24	

[2]

- (b) Draw the graph of $N = 0.45 \times 1.07^x$.



[2]

- (c) Use the graph to find **the year** when the gannet population is predicted to reach 1000.

(c) [2]