

1. Find the recursive and the explicit form of the following sequence hence use it to determine the 7th term.

$$\frac{1}{2}, \frac{3}{4}, \frac{9}{8}, \frac{27}{16}, \dots$$

Answer Keys

Day 94:

1. $A_{n+1} = \frac{3}{2}A_n$

$$A_n = \frac{1}{2} \times \left(\frac{3}{2}\right)^{n-1} = \frac{3^{n-1}}{2^n}$$

$$A_7 = \frac{729}{128}$$