

MA	2	What amount must be invested now at 4% per annum, compounded quarterly, so	1
SQ		that in five years it will have grown to \$60 000?	
		A. \$8919 B. \$11 156 C. \$49 173 D. \$49 316	

C

4% p.a. = 1% per quarter

5 years = 20 quarters

Need to find present value (PV):

$$\begin{aligned}\therefore PV &= \frac{FV}{(1+r)^n} \\ &= \frac{60000}{1.01^{20}} \\ &= 49\,172.66822\dots \\ &= 49\,173 \text{ (nearest whole)} \qquad \therefore \text{ need to invest } \$49\,173 \text{ now.}\end{aligned}$$

* These solutions have been provided by [projectmaths](http://projectmaths.com.au) and are not supplied or endorsed by NESA.

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