## Junior cycle Maths problem of the day 19/10/2022

Sarah is three times as old as Peter. Max is twice as old as Peter. Lucy is two years older than Max. Altogether their ages sum to 26 years. How old is Lucy?


## Senior cycle Maths problem of the day 19/10/2022

- A rocket blasts off from Earth heading for Mars, getting faster as it travels. In fact, the rocket's speed doubles every week that it's in space. If the rocket lands on Mars in week 12, in which week was it halfway there?



## Answers

$J C$ - $S=3 P($ Sarah is 3 times as old as Max), $M=2 P(M a x$ is 2 times as old as Peter), $\mathrm{L}=\mathrm{M}+2$ (Lucy's age is equal to Max's age plus 2 years), $S+P+M+L=26$

So $3 \mathrm{P}+\mathrm{P}+2 \mathrm{P}+2 \mathrm{P}+2=26,8 \mathrm{P}+2=26,8 \mathrm{P}=26-2=24, \mathrm{P}=24 / 8=3$
We now know that Peter is 3 years old, and Max is twice Peter's age (Equation 2), therefore Max is 6 .Now we can calculate Lucy's age using Equation 3. If Lucy is 2 years older than Max, Lucy must be 8.

Ans: 8
LC - Week 11

