

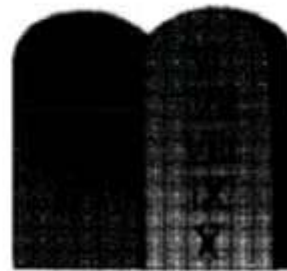
Chung and Yuan decided to make up a new number system, similar to Roman numerals. They gave their sister the following clues to work it out.

$$\Omega \Omega \oplus = 7$$

$$\Phi \Phi \Phi \oplus = 37$$

$$\Phi \Omega = 15$$

- What number does each symbol represent?
- What would $\oplus \Omega \Phi$ equal?
- How would you write the number 56?



When David, who was born in 1970, turned 24, his niece Peta was a quarter of his age.

- How old will Peta be when David is exactly twice her age?
- In what year will Peta celebrate her 21st?



Joseph bought a piece of wood at the hardware store to build a toy music stand. He cut the wood in half, split one half into quarters and the other half into thirds. He used the thirds to make the tripod base, but only used three of the quarters for the rest.

- If Joseph only had 15cm of wood left, how much wood did he have in the first place?

