

Maths Week Senior Quiz - Monday 14 October

A man leaves €7936 in his will. He has a wife, three sons and four daughters. He has instructed that his daughters get three times as much as his sons and his sons get twice as much as his wife. How much does his wife receive?

let $x = \text{wife's share}$

$\Rightarrow 2x = \text{sons' share}$

$\Rightarrow 3(2x) = 6x \text{ daughters' share}$

4 daughters + 3 sons + wife = 7936

$$4[6x] + 3[2x] + x = 7936$$

$$24x + 6x + x = 7936$$

$$31x = 7936 \Rightarrow x = \frac{7936}{31} = \text{€}256$$