A mother distributes six dollars equally among her sons and daughters to spend at the candy store. Two young cousins join in and share in the equal distribution, with each son/daughter now receiving 25 cents less than the original amount. How many sons and daughters are there?

Six dollars are 24 quarters. Now
$$24 = 2 \cdot 12 = 3 \cdot 8 = 4 \cdot 6.$$

We choose two factorisations $ab = cd$ with $a + 1 = c$ and $b = d + 2$. This means there were eight children in the final party, and six sons and daughters.