

MATHCOUNTS[®] Problem of the Week Archive

Three Sons and a Daughter – June 20, 2022

Problems

Archer has three sons named Baker, Carver and Decker. Archer's age is five times the sum of Carver's and Decker's ages. The sum of Baker's and Decker's ages is half Archer's age. If Baker's age is five times Carver's age, what is the ratio of the ages of Carver and Decker? Express your answer as a common fraction.

In addition to the information given in the previous problem, we now are told the product of Carver's age and Decker's age is equal to Baker's age. What is the sum of the ages of Baker, Carver and Decker?

Archer's first-born child is a daughter whose name is Tailor. If Tailor is 18 years old, how old was Archer when she was born?