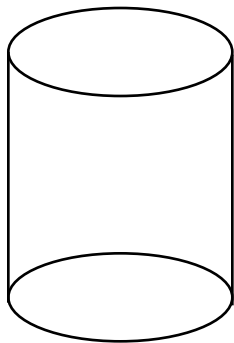


1 The sum of the ages of three children is 32 years. The age of the oldest is twice the age of the youngest. The ages of the two older children differ by three years. What is the age of the youngest child? (x = youngest, y = next oldest, z is the oldest)

2 When the same number is added to both the numerator and denominator of $\frac{2}{5}$, the value of the new fraction is $\frac{2}{3}$. What number was added to both the numerator and denominator? (ratio/proportion)

3 This barrel has a diameter of 4 feet and is 5 feet high. One cubic foot of water weighs approximately 2.5 pounds. What is the approximate total weight of this barrel when it is full of water? (the empty barrel weighs 20 pounds)



Formula = 20 pounds + 2.5 (volume of barrel)

Volume of a cylinder = $(\pi r^2) h$