The Weekly Rigor

No. 351

"A mathematician is a machine for turning coffee into theorems."

March 13, 2021

50 Word Problems Involving Rational Equations

(Part 1)

PROBLEMS

Proportion

1. Sandra's car uses 20 gallons of gas to travel 400 miles. If she currently has 7 gallons of gas in her car, how much gas is needed to travel 200 miles?

2. Biologists tagged 900 rabbits in Bryer Lake national park. At a later date, they found 6 tagged rabbits in a sample of 2,000. Estimate the total number of rabbits in Bryer Lake national park.

3. In a chemistry class, 5 out of every 7 students are girls. If there are 70 students in the class, how many are girls?

4. A large painting has a length of 18 inches and a width of 12 inches. If each dimension is reduced by x inches to make the ratio of length to width 5 to 3, what is the value of x?

"Only he who never plays, never loses."

Written and published every Saturday by Richard Shedenhelm