The Weekly Rigor

No. 359

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

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50 Word Problems Involving Rational Equations

(Part 9)

33. Working together, Keven and Casey can wash the windows in $3\frac{1}{2}$ hours. Kevin can wash the windows by himself in $6\frac{1}{2}$ hours. How long would it take Casey to wash the windows by herself?

34. Working together, Dan and Julio can mow a lawn in 12 minutes. Julio can mow the lawn by himself in 10 minutes less time than it takes Dan by himself. How long does it take each of them to mow the lawn alone?

35. Working together, John and Bill can mow a yard in 24 minutes. When John mows the yard by himself, he takes 4 times longer than Bill. How long would it take for each person to mow the yard if they were working alone?

36. An inlet pipe can fill a tank in 10 minutes. A drain can empty the tank in 12 minutes. If the tank is empty, and both the pipe and drain are open, how long will it take before the tank overflows?

"Only he who never plays, never loses."

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