Job or Work Problems
(Needed equations or formulas)

Worker's rate = $\frac{1}{\text{total time alone}}$

Examples:

Joe completes a job in 11 hours; his rate is $\frac{1}{11}$ job/hour.

Molly completes a job in 7 days; her rate is $\frac{1}{7}$ job/day.

A copy machine completes a job in 73 minutes; its rate is $\frac{1}{73}$ job/minute.

Part of Job = (rate)(time)

Examples:

If Joe works at the job for 6 hours, he has completed $\frac{1}{11}(6)$ or $\frac{6}{11}$ of the job.

If Molly works at her job for 2½ days, she has completed $\frac{1}{7}\left(\frac{5}{2}\right)$ or $\frac{5}{14}$ of the job.

If the copy machine has been making copies for 27 minutes, it has completed $\frac{1}{73}(27)$ or $\frac{27}{73}$ of the job.

Plan: Part of job 1st + Part of job 2nd = 1 Job