

Review Solve the following rational equations:

1. $\frac{x}{4} + \frac{x}{3} = 1$

2. $\frac{x}{5} + \frac{x}{2} = 1$

Word Problems involving work and time

Work problems use the following formula: $\frac{T}{A} + \frac{T}{B} = 1$. Where T is the total time for two people to complete 1 job. A is the time for one person to complete the job. B is the time for a different person to complete the 1 job. In general, T will be the variable solved for. A and B will be given values of time.

3. James can mow a lawn in 2 hours. Mandy can mow the same lawn in 1 hour.
- Make a guess on how long it would take to mow the lawn if they work together.
 - Write an equation that can be used to find the time t , in hours; it would take James and Mandy to mow the lawn together.
 - Solve the equation for t that you wrote in part b)
4. Sam can edit a video in 16 minutes. Her brother can edit the same video 24 minutes.
- Make a guess on how long it would take to edit the video if they work together.
 - Write an equation that can be used to find the time t , in minutes; it would take Sam and her brother to edit the video together.
 - Solve the equation for t that you wrote in part b)