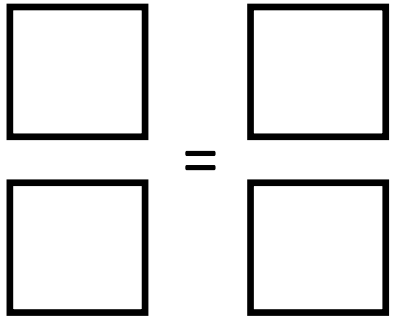
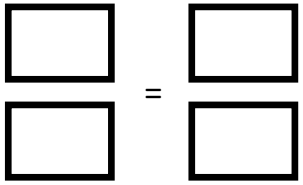
Solving Word Problems with Ratios and Proportions

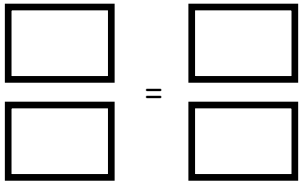


- Set one ratio up with information about the sample. Set the other ratio up with information about the total. Label these to avoid later confusion.
- The numerators on each side of the proportion should describe the same thing. One should describe the sample and the other should describe the total.
- The denominators on each side of the proportion should describe the same thing. One should describe the sample and the other should describe the total.
- If your variable is in the denominator, take the reciprocal of both sides before solving.
- Solve for the variable.
- Substitute to verify your solution.

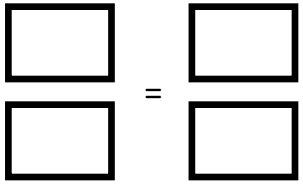
Antonio read the first 60 pages of his book in 40 minutes. At this rate, how long should it take Antonio to read the rest of his 210 page book?



Nikki ate 15 grapes in one minute and twenty seconds. At this rate, how long should it take her to eat 85 grapes?



The ratio of boys to girls in Ms. Hagan's classes is 4 to 5. Ms. Hagan has 90 students. How many students are girls?



Dave typed the first 8 pages of his report in 24 minutes. At this rate, how long should it take Dave to finish typing the rest of his 60 page report?