

1. The Delaware Demolition Company wants to build a brick wall to hide the area where they store wrecked cars from public view. One bricklayer can build this wall in 5 days. Another bricklayer can do the job in 4 days. The Delaware Demolition Company decides to hire them both to work together. How long will it take the two bricklayers to finish this wall?

2. A large hose can fill a pool in 8 hours. A small hose can fill the pool in 10 hours. If both hoses are used, how long will it take to fill the pool?

3. Mary takes twice as long as Carole to make the display case at school. Together it takes 4 hours to do the display case. How long does it take Mary to do it by herself.

4. Mike can wash and wax the car in $4\frac{1}{2}$ hours. Ray can do the job in 3 hours. How long will it take both boys working together to wash and wax the car?

5. It takes Angus three days to cultivate the garden. It takes Helga four days to do the same job. How long does it take them to do the job if they work together?
6. The numerator of a fraction is 4 more than twice the denominator. If two is subtracted from both the numerator and denominator, the results is 8. Find the original fraction.
7. The ratio of 4 less than a number to 26 more than that number is 1 to 3. What is the number?
8. The denominator of a fraction is one less than three times the numerator. If 12 is added to both the numerator and the denominator, the resulting fraction has a value of $\frac{3}{4}$. Find the original fraction.
9. One integer is 2 less than another integer. Three times the reciprocal of the lesser plus five times the reciprocal of the greater integer is $\frac{7}{8}$. What are the two integers?