1. Working alone, Ryan can dig a 10 ft by 10 ft hole in five hours. Jordan can dig the same hole in six hours. How long would it take them if they worked together?
2. Shawna can pour a large concrete driveway in six hours. Dan can pour the same driveway in seven hours. Find how long it would take them if they worked together.
3. It takes Trevon ten hours to clean an attic. Cody can clean the same attic in seven hours. Find how long it would take them if they worked together.
4. Working alone, Carlos can oil the lanes in a bowling alley in five hours. Jenny can oil the same lanes in nine hours. If they worked together, how long would it take for them to do the job?
5. Working together, Paul and Daniel can pick forty bushels of apples in 4.95 hours. Had he done it alone it would have taken Daniel 9 hours. Find how long it would take Paul to do it alone.
6. Working together, Jenny and Natalie can mop a warehouse in 5.14 hours. Had she done it alone it would have taken Natalie 12 hours. How long would it take Jenny to do it alone?
7. Rob can tar a roof in nine hours. One day his friend Kayla helped him and it only took 4.74 hours. How long would it take Kayla to do it alone?
8. Working alone, it takes Kristin 11 hours to harvest a field. Kayla can harvest the same field in 16 hours. Find how long it would take them if they worked together.
9. Working alone, Dan can sweep a porch in 15 minutes. Alberto can sweep the same porch in 11 minutes. If they worked together how long would it take them?
10. Krystal can wax a floor in 16 minutes. One day her friend Perry helped her and it only took 5.76 minutes. How long would it take Perry to do it alone?

Reflection and Extension:

How do you feel about these types of problems? How does the strategy you use to solve these types of problems relate to chemical mixture or percent composition problems?

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CHALLENGE Problems:

**“Work” Problems: More than Two Persons:**

Jane, Paul and Peter can finish painting the fence in 2 hours. If Jane does the job alone she can finish it in 5 hours. If Paul does the job alone he can finish it in 6 hours. How long will it take for Peter to finish the job alone?

### “Work” Problems: Pipes Filling up a Tank:

A tank can be filled by pipe A in 3 hours and by pipe B in 5 hours. When the tank is full, it can be drained by pipe C in 4 hours. if the tank is initially empty and all three pipes are open, how many hours will it take to fill up the tank?

[Solutions Resource](http://www.onlinemathlearning.com/work-problems.html)