WORK PROBLEMS

1. A man can paint a house in 8 days that his helper can paint in 12 days. If they worked together, how long would it take them to paint the house?

2. One pipe can fill a tank in 18 minutes, a second in 30 minutes, and a third in 45 minutes. If all three pipes were opened at the same time, how long would it take to fill the tank?

3. A crew of men can lay a certain amount of pipe in 15 days. With the help of a second crew, the pipe can be laid in 6 days. How long would it take the second crew, working alone, to lay the pipe?

4. Pipe A can fill a tank in 40 minutes. Pipe B can fill the tank in 60 minutes. Pipe A is opened and after ten minutes pipe B is opened. How long does it take them to complete filling the tank?

5. A painter requires 10 hours to paint 3 rooms. His helper can do the same job in 15 hours. How long would it take them if they worked together?

6. Three machines can each manufacture a radio in 12 minutes, 15 minutes, and 20 minutes, respectively. If the three machines worked simultaneously, how long would it take them to manufacture 1000 radios?

7. It takes Jim 4 hours longer to clean their house than it takes Lee. If both people work together, the house can be cleaned in 2 hours and 40 minutes. How long would it take each person working alone to clean the house?

8. One pipe can fill a tank in 8 hours and another can do it in 6 hours. If both pipes are opened but the faster pipe gets clogged after three hours, how long will it take to fill the tank?

9. A new machine can make 500 bookcases in 3 _ hours, and the old machine can do the same job in 6 hours. How long will it take them to make 500 bookcases working together?

10. Jim can clean the house in 9 hours and Wendy can clean the house in 6. How long will it take them working together to clean the house?