

Word problems — Work rate

Name: _____

Date: _____

Read each problem. Write the answer.

- 1 A tank has two faucets. One fills it alone in 5 hours, the other in 12 hours. Both faucets are opened together.

How long will it take to fill the tank? $\frac{1}{5} + \frac{1}{12} = \frac{17}{60}$, so $1 \div \frac{17}{60} = 3 \frac{9}{17}$ hours

- 2 A tank is filled by two hoses: alone, one takes 2 hours and the other 11 hours. Both hoses are turned on at the same time.

How long will it take the two hoses to fill the tank? ____

- 3 A tank is filled by two faucets. Working alone, one faucet takes 5 hours and the other 4 hours.

With both open, what fraction of the tank is filled in one hour? ____

- 4 A tank is filled by two pipes. Working alone, one pipe takes 8 hours and the other 7 hours.

With both open, what fraction of the tank is filled in one hour? ____



Word problems · Work rate — Answer key

1. $\frac{1}{5} + \frac{1}{12} = \frac{17}{60}$, so $1 \div \frac{17}{60} = 3 \frac{9}{17}$ hours

2. $\frac{1}{2} + \frac{1}{11} = \frac{13}{22}$, so $1 \div \frac{13}{22} = 1 \frac{9}{13}$ hours

3. $\frac{1}{5} + \frac{1}{4} = \frac{9}{20}$

4. $\frac{1}{8} + \frac{1}{7} = \frac{15}{56}$