

6.13 Work and Teamwork Rates

Chapter 6: Ratios, Rates, and Proportional Reasoning

Name: _____

Date: _____

Class/Period: _____

Problem 6.195 Four workers take 30 min. How long for 8 identical workers?

Problem 6.198 A job needs 120 worker-minutes. Find time for 8 workers.

Problem 6.196 Six printers take 10 min. How long for 3 identical printers?

Problem 6.199 A job needs 42 worker-hours. Find hours for 6 workers.

Problem 6.197 Find worker-minutes: 5 workers for 18 minutes.

Problem 6.200 Three workers make 24 items in 2 hours. Find items per worker-hour.

6.13 Work and Teamwork Rates

Chapter 6: Ratios, Rates, and Proportional Reasoning

Problem 6.201 Use the previous rate to find items made by 5 workers in 3 hours.

Problem 6.204 Explain why wt is constant for one fixed job.

Problem 6.202 Two pumps fill 6 tanks in 9 hours. Find pump-hours per tank.

Problem 6.205 Give one real reason identical-worker assumptions may fail.

Problem 6.203 Find time for 4 pumps to fill 8 tanks at the same rate.

Problem 6.206 If workers triple, what happens to time for a fixed job?

6.13 Work and Teamwork Rates

Chapter 6: Ratios, Rates, and Proportional Reasoning

Problem 6.207 Seven workers build 14 identical sections in 6 hours. How long do 9 workers need to build 27 sections?

Problem 6.209 Five painters paint 3 equal rooms in 12 hours. How many rooms can 8 painters paint in 20 hours?

Problem 6.208 Four machines produce 600 parts in 5 hours. How many machines are needed to produce 1,080 parts in 6 hours?

Problem 6.210 A job takes 15 workers 8 days. After 3 days, 5 workers leave. Assuming work is continuous and equal, how many additional days are needed?