

4.2

Word Problem with Clocks

• Example 1

Jill works 4.2 h and receives \$21. How much will she get if she works 10 h?

Solution

First compute Jill's hourly pay:

$$\frac{21}{4.2} = 5$$

Jill is paid \$5 per hour.

Then multiply her hourly pay by the total number of hours:

$$5 \times 10 = 50$$

Jill will get \$50.

● ● ● CHECK YOURSELF 1

When George is running long distances, it takes him an average of 8.5 minutes to run 1 mi. At this rate, how long will it take him to run 20 mi?

● ● ● CHECK YOURSELF ANSWER

1. 170 min or 2h 50 min.

4.2 Exercises

Name _____

Section _____

Date _____

A N S W E R S

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

Solve each application.

1. **Shift work.** Meg's job is assembling lawn chairs. She can put together 55 chairs in 4 h. At this rate, how many chairs can she assemble in an 8-h shift?

2. **Distance.** A car travels 165 mi in 3 h. How far will it travel in 8 h if it continues at the same speed?

3. **Salary.** Jane works 7.75 h and receives \$38.75 pay. What will she receive at the same rate if she works 12 h?

4. **Timing.** You find that your watch gains 2 minutes in 6 h. How much will it gain in 3 days?

5. **Film processing.** A film processing machine can develop three rolls of film every 8 min. At this rate, how many rolls can be developed in a 4-h period?

6. **Distance.** A plane can fly 480 mi in 3 hours. At this rate, how long will it take to travel 800 mi?

7. **Mufflers installed.** An assembly line can install 5 car mufflers in 4 min. At this rate, how many mufflers can be installed in an 8-h shift?