

## Computing Average Speed

**EXAMPLE** Francine drives 259 miles in 6 hours and 24 minutes. Find her average rate of speed.

**Step 1** Convert minutes to a decimal part of an hour by dividing by 60.

$$\begin{array}{r} .4 \text{ Hours} \\ 60 \overline{) 24.0} \text{ Minutes} \end{array}$$

**Step 2** Write the hours as a decimal number.

$$\begin{aligned} 6 \text{ hours and } 24 \text{ minutes} &= \\ 6 \text{ hours} + .4 \text{ hours} &= 6.4 \text{ hours} \end{aligned}$$

**Step 3** Divide the miles by the hours

$$\begin{array}{r} 40.4 \approx 40 \text{ miles per hour} \\ 6.4 \overline{) 259.0} \end{array}$$

Francine's average rate of speed is 40 miles per hour.

**Directions** Find the average speed for these trips. Round your answer to the nearest mile per hour.

	<b>Distance</b>	<b>Time</b>	<b>Average Speed</b>
1.	140 miles	3 hours, 30 minutes	_____
2.	238 miles	5 hours, 24 minutes	_____
3.	1,205 miles	30 hours, 45 minutes	_____
4.	387 miles	12 hours, 54 minutes	_____
5.	446 miles	17 hours, 48 minutes	_____
6.	968 miles	22 hours, 15 minutes	_____
7.	1,097 miles	27 hours, 30 minutes	_____
8.	488 miles	14 hours, 42 minutes	_____
9.	316 miles	7 hours, 36 minutes	_____
10.	324 miles	9 hours, 55 minutes	_____
11.	349 miles	12 hours, 6 minutes	_____
12.	208 miles	4 hours, 12 minutes	_____
13.	472 miles	10 hours, 14 minutes	_____
14.	885 miles	29 hours, 30 minutes	_____
15.	976 miles	23 hours, 18 minutes	_____



## Buying Gasoline

**EXAMPLE** Simone has \$10.00. She wants to buy gas at \$1.09<sup>9</sup>.  
How many gallons can she buy?

**Step 1** Write the price of the gas as a decimal.  $\$1.09^9 = 1.099$

**Step 2** Divide the amount of money by the price of one gallon of gas.  $\frac{9.09}{1.099} \approx 9.1$  gallons

Simone may purchase 9.1 gallons.

**Directions** Find the amount of gas you can buy with each amount of money. Round your answer to the nearest tenth of a gallon.

	Amount of Money	Cost per Gallon of Gasoline	Gallons of gas
1.	\$10	\$1.08 <sup>9</sup>	_____
2.	\$20	\$1.23 <sup>9</sup>	_____
3.	\$50	\$.99 <sup>9</sup>	_____
4.	\$14	\$1.35 <sup>9</sup>	_____
5.	\$25	\$1.17 <sup>9</sup>	_____
6.	\$5	\$1.08 <sup>9</sup>	_____
7.	\$3	\$.98 <sup>9</sup>	_____
8.	\$12	\$1.01 <sup>9</sup>	_____
9.	\$10	\$1.02 <sup>9</sup>	_____
10.	\$15	\$1.42 <sup>9</sup>	_____
11.	\$25	\$1.34 <sup>9</sup>	_____
12.	\$22	\$1.02 <sup>9</sup>	_____
13.	\$40	\$1.11 <sup>9</sup>	_____
14.	\$26	\$1.07 <sup>9</sup>	_____
15.	\$10	\$1.28 <sup>9</sup>	_____
16.	\$9	\$1.31 <sup>9</sup>	_____
17.	\$16	\$1.11 <sup>9</sup>	_____

