

1.3 Multiplying and Dividing Whole Numbers

#67. Wages A cook worked 12 hours at \$11 per hour. How much did she earn?
She earned $12 \times \$11 = \132

#68. CHESSBOARDS A chess board consists of 8 rows, with 8 squares in each row. How many squares are on a chessboard?

$$8 \times 8 = 64 \text{ squares}$$

#70 Renting Apartment. Mia owns an apartment building with 18 units. Each unit generates a monthly income of \$450. Find her total monthly income.

$$\text{her total monthly income} = 18 \times \$450 = \$8100$$

#74. Room Capacity A college lecture hall has 17 rows of 33 seats. A sign on the wall reads: "Occupancy by more than 570 persons is prohibited." If the seats are filled and there is one instructor, is the college breaking the rule?

$$\text{Number of seats} = 17 \times 33 = 561 \text{ seats} + 1 \text{ instructor} < 570$$

The college is not breaking the rule.

#76. Changing units. There are 12 inches in 1 foot. How many inches in 80 feet.

$$\text{In 80 feet, there are } 80 \times 12 = 960 \text{ inches}$$

#80. Lift Systems If the bus shown below weighs 58,000 pounds, how much weight is on each jack?

$$\text{Weight on each jack} = \frac{58000}{4} = 14500 \text{ lbs}$$

#82. RUNNING Brian runs 7 miles each day. In how many days will Brian run 371 miles?

$$\text{Number of days} = \frac{371}{7} = 53 \text{ days}$$

#88. Area of Wyoming The State of Wyoming is approximately rectangular-shaped with dimensions 360 miles long and 270 miles wide. Find its perimeter and its area.

$$\text{Perimeter} = 2L + 2W = 2 \times 360 + 2 \times 270$$

$$= 720 + 540 = 1260 \text{ miles.}$$

$$\text{Area} = L \cdot W = 360 \cdot 270 = 97200 \text{ miles}^2$$