

# UNIT Operations with Decimals

## EXAMPLE

Mrs Brown wanted to clean her  $3.25 \text{ m} \times 4.6 \text{ m}$  carpet. The cleaners said that the carpet would cost \$5.20 a square metre to clean. How much would it cost Mrs Brown to have her carpet cleaned?

Area of the carpet :  $3.25 \times 4.6 = 14.95$

Cost :  $14.95 \times 5.2 = 77.74$

*Answer :* It would cost Mrs Brown \$77.74 to have her carpet cleaned.

### **Solve the problems. Show your work.**

Lori has just moved into a new apartment. She is measuring the dimensions of her living room, dining room and hallway.

- ① The area of her living room is  $38.88 \text{ m}^2$ . If the length of the room is  $7.2 \text{ m}$ , what is the width?

*Answer :* The width is \_\_\_\_\_

- ② The dining room has a fancy plaster border around the top of the walls. If the dining room is  $5.5 \text{ m}$  wide and  $8.14 \text{ m}$  long, what is the length of the border?

*Answer :* \_\_\_\_\_

- ③ What is the area of the dining room?

*Answer :* \_\_\_\_\_

- ④ The hallway is  $2.4 \text{ m}$  long and covered with square tiles. Each side of the tiles is  $0.3 \text{ m}$ . How many tiles are there in the length of the hallway?

*Answer :* \_\_\_\_\_

- ⑤ The hallway is  $1.8 \text{ m}$  wide. How many tiles are there in the entire hallway?

*Answer :* \_\_\_\_\_

Paul and Petula were going on a trip with their parents. They drove 259.79 km on the first day, 302.57 km on the second day and an average of 225.67 km on the next 2 days.

- ⑥ How far did they drive for the whole trip?

*Answer :* \_\_\_\_\_

- ⑦ If the average speed was 75 km/h, how many hours did they drive for the trip?

*Answer :* \_\_\_\_\_

- ⑧ They filled up their car 3 times – 46.37 L before the trip, 49.45 L on the second day, and 42.69 L on the fourth day. On average, how many litres of gasoline did they buy each time?

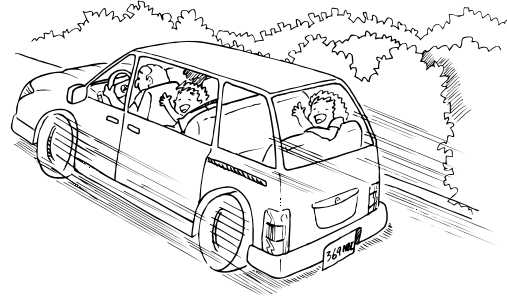
*Answer :* \_\_\_\_\_

- ⑨ If the average fill-up cost was \$27.76, what would the total fill-up cost be?

*Answer :* \_\_\_\_\_

- ⑩ They spent \$58.27 on food on the first day, \$63.39 on the second day and \$123.84 on the next 2 days. How much did they spend on food in all?

*Answer :* \_\_\_\_\_



- ⑪ How much did they spend on food per day?

*Answer :* \_\_\_\_\_

- ⑫ Paul's mother said, 'The cost we spent on food exceeded our budget by \$25.50.' What was their budget for food?

*Answer :* \_\_\_\_\_

- ⑬ Paul's mother bought 3 kg of ham at \$2.29 a kilogram, 4.6 kg of turkey at \$3.40 a kilogram, 2.4 kg of potatoes at \$0.60 a kilogram and 3.8 kg of beans at \$1.40 a kilogram. How much more money did she spend on meat than on vegetables?

*Answer :* \_\_\_\_\_

- ⑭ The lodging cost an average of \$26.69 per night per person. If they spent 3 nights there, what would be their total lodging bill?

*Answer :* \_\_\_\_\_