Review Exercise Set 34

Exercise 1: Convert the following measurement.

53 cm = ? mm

Exercise 2: Convert the following measurement.

17038 cm = ? km

Exercise 3: Convert the following measurement.

5 m 39 cm = ? m

Exercise 4: Convert the following measurement.

8 km 95 m = ? km

Exercise 5: Find the total length, in centimeters, of the object in the diagram below.

![Diagram showing the measurements of 100 cm, 450 mm, and 1.75 m.]

?
Exercise 1: Convert the following measurement.

\[
53 \text{ cm} = \ ? \text{ mm}
\]

Conversion factor: \(1 \text{ cm} = 10 \text{ mm}\)

\[
53 \frac{\text{ cm}}{1} \times \frac{10 \text{ mm}}{1 \text{ cm}} = \frac{530 \text{ mm}}{1} = 530 \text{ mm}
\]

The correct answer is that \(53 \text{ cm} = 530 \text{ mm}\)

Exercise 2: Convert the following measurement.

\[
17038 \text{ cm} = \ ? \text{ km}
\]

Conversion factors:

\[
\frac{100 \text{ cm}}{1 \text{ m}} \quad \frac{1000 \text{ m}}{1 \text{ km}}
\]

\[
17038 \frac{\text{ cm}}{100 \text{ cm}} \times \frac{1 \text{ m}}{100 \text{ cm}} \times \frac{1 \text{ km}}{1000 \text{ m}} = \frac{17038 \text{ km}}{100000} = 0.17038 \text{ km}
\]

The correct answer is that \(17038 \text{ cm} = 0.17038 \text{ km}\)

Exercise 3: Convert the following measurement.

\[
5 \text{ m} 39 \text{ cm} = \ ? \text{ m}
\]

First, convert the centimeters into meters

\[
39 \frac{\text{ cm}}{100 \text{ cm}} = \frac{39 \text{ m}}{100} = 0.39 \text{ m}
\]

Now, add the result to the meters in the given measurement

\[
5 \text{ m} + 0.39 \text{ m} = 5.39 \text{ m}
\]

The correct answer is that \(5 \text{ m} 39 \text{ cm} = 5.39 \text{ m}\)
Exercise 4: Convert the following measurement.

8 km 95 m = ? km

Convert the given meters to kilometers

\[ 95 \text{ m} \times \frac{1 \text{ km}}{1000 \text{ m}} = \frac{95 \text{ m}}{1000} = 0.095 \text{ km} \]

Add the kilometer measurements together

8 km + 0.095 km = 8.095 km

The correct answer is that 8 km 95 m = 8.095 km

Exercise 5: Find the total length, in centimeters, of the object in the diagram below.

Convert all individual measurements into centimeters

\[ 450 \text{ mm} \times \frac{1 \text{ cm}}{10 \text{ mm}} = \frac{450 \text{ cm}}{10} = 45 \text{ cm} \]

\[ 1.75 \text{ m} \times \frac{100 \text{ cm}}{1 \text{ m}} = \frac{175 \text{ cm}}{1} = 175 \text{ cm} \]

Add the centimeters together

100 cm + 45 cm + 175 cm = 320 cm

The correct answer is that the total length of the object is 320 cm