

Significant figures

State the number of significant digits in each measurement.

1) 2804 m

2) 2.84 km

3) 5.029 m

4) 0.003068 m

5) 4.6×10^5 m

6) 4.06×10^{-5} m

7) 750 m

8) 75 m

9) 75,000 m

10) 75.00 m

11) 75,000.0 m

12) 10 cm

Solve the following problems and report answers with appropriate number of significant digits.

1) $6.201 \text{ cm} + 7.4 \text{ cm} + 0.68 \text{ cm} + 12.0 \text{ cm} =$

2) $1.6 \text{ km} + 1.62 \text{ m} + 1200 \text{ cm} =$

3) $8.264 \text{ g} - 7.8 \text{ g} =$

4) $10.4168 \text{ m} - 6.0 \text{ m} =$

5) $12.00 \text{ kg} + 15.001 \text{ kg} =$

6) $1.31 \text{ cm} \times 2.3 \text{ cm} =$

7) $5.7621 \text{ m} \times 6.201 \text{ m} =$

8) $120 / 15.75 =$

9) $7600.4 / 12.3 =$