Significant Figures Practice

1. Find the number of significant figure in each of the following:

(a) 7.3 2

(b) 162.5 m 4

(c) 306 g 3

(d) 3.57×10^{-2} m 3

(e) 7.005 kg 4

(f) 4.5 E-2 km 2

(g) 0.00234 l 4

(h) 8.2030×10^{1} mg 5

(i) 20.020200 g 8

(j) 30.00 km 4

(k) 2.500 E3 ml 4

(l) 60.00 4

2. Round off each of the following correct up to 3 significant figures:

(a) 56.4517 g 56.5

(b) 5.20760×10^{-2} kg 5.21

(c) 33.311 km 33.3

(d) 50.001 cm 50.0

(e) 0.0012485 m 0.00125

(f) 1.3020 E-3 l

1.30 E-3

3. Round off:

(a) 15.256 g correct to the three significant figures. 15.3 g

(b) 8.38 E-3 mg correct to the two significant figures. 8.4 E3 mg

(c) 0.004509 g correct to the one significant figures. 0.005 g

(d) 29.404 mm correct to the four significant figures. 29.40 mm

(e) 2.2311×10^{4} km correct to the four significant figures. 2.231 E4 km

(f) 3.0921 kg correct to the two significant figures. 3.1 kg

(g) 0.003519 mm correct to the one significant figures. 0.004 mm

4. Round off:

(a) $ 3067.665 to the nearest cents.

3067.7

(b) 0.00499 m to the nearest cm.

100 cm = 1 m

× 100 = .0499 cm

exact

= 0 cm

(c) 17.0444 kg to the nearest g.

17.044 kg

17.0444 × 1000 = 17044.4 g

(d) $ 59.52 to the nearest dollar

$60.

SF6