Exercise 48

How many significant figures are contained in each of the following measurements?

(a) 38.7 g

(b) 2×10^{18} m

(c) 3,486,002 kg

(d) 9.74150×10^{-4} J

(e) 0.0613 cm^3

(f) 17.0 kg

(g) 0.01400 g/mL

Solution

(a) 3 significant figures

(b) 1 significant figure

(c) 7 significant figures

(d) 6 significant figures

(e) 3 significant figures

(f) 3 significant figures

(g) 3 significant figures

(h) 4 significant figures