

Exercise 38

Give the name and symbol of the prefixes used with SI units to indicate multiplication by the following exact quantities.

- (a) 10^3
- (b) 10^{-2}
- (c) 0.1
- (d) 10^{-3}
- (e) 1,000,000
- (f) 0.000001

Solution

The SI prefixes and their meanings are listed in Table 1.3 on pages 30-31.

- (a) $10^3 = k = \text{kilo}$
- (b) $10^{-2} = c = \text{centi}$
- (c) $0.1 = d = \text{deci}$
- (d) $10^{-3} = m = \text{milli}$
- (e) $1,000,000 = 10^6 = M = \text{mega}$
- (f) $0.000001 = 10^{-6} = \mu = \text{micro}$