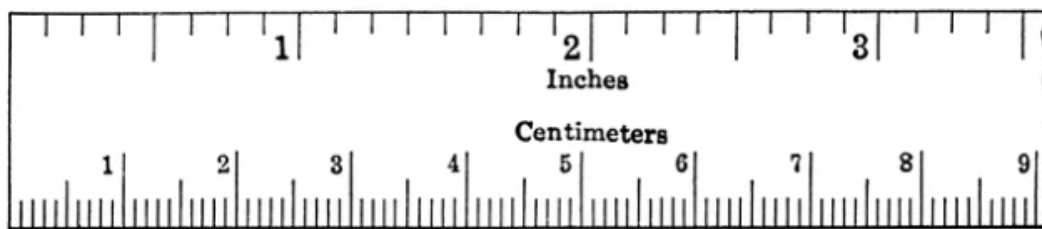


## Sec 1.3 Relating SI and Imperial Units



Approximately, how many cm are in 1 inch? And how many inches in one cm?

If we have the conversion factor, we can convert between SI and Imperial Units.

Imperial Units to SI Units	SI Units to Imperial Units
1 in. ~ 2.5 cm     1 in. = 2.54 cm	1 mm ~ $\frac{4}{100}$ in. (0.04 in.)
1 ft. ~ 30 cm	1 cm ~ $\frac{4}{10}$ in. (0.4 in.)
1 ft. ~ 0.3 m	1 m ~ 39 in.
1 yd. ~ 90 cm     1 yd. = 91.44 cm	1 m ~ $3\frac{1}{4}$ ft. (3.25 ft.)
1 yd. ~ 0.9 m	1 km ~ $\frac{6}{10}$ mi. (0.6 mi.)
1 mi. ~ 1.6 km	

### Example 1

A bowling lane is approximately 19 m long. What is the measurement to the nearest foot?

### Example 2

After meeting in Emerson, Manitoba, Hannah drove 62 mi. south and Frank drove 98 km north. Who drove further?

### Example 3

Alex is 6 ft. 2 in. tall. What is his height to the nearest centimeter?

### Example 4

A truck driver knows that her semitrailer is 3.5 m high. The support beams of the bridge are 11 ft. 9 in. high. Will the vehicle fit under the bridge?

#### Work Book Questions

p.22 #4abe, 5bd, 9, 10, 11, 13abc

#### Extra Practice Questions

p.22 #4cdf, 5ac, 8, 12a, 14