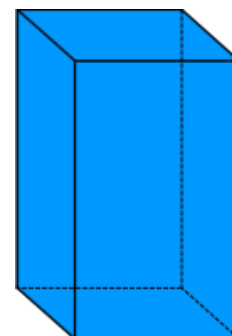
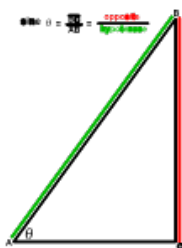
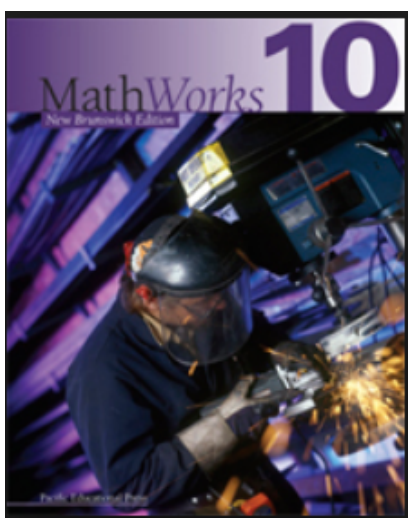


# Geometry, Measurement & Finance 10



**GMF 10 Course Outline Fall 2018.pdf**

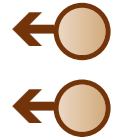


## 4.1 - Systems of Measurement



### Make Connections

In 1976, Canada adopted SI units to measure length. However, construction and manufacturing industries continue to use **imperial units**. Many Canadians use imperial units to measure their height.



What is your height?

Look around the classroom.

Which object has a length of about one foot?

Which object has a length of about one inch?

Which object has a length of about one yard?

# Activate Prior Learning: SI Units



Common SI units of length are the metre, centimetre, and millimetre.

What are referents for these SI units?

Unit	Referent
millimetre	dime
centimetre	pinky width
metre	door knob height



1.2 Math Lab: Measuring Length and Distance

## Systeme international d'unites (SI)

This is a measurement system commonly used in Canada. It is a decimal system based on multiples of 10. This means you can convert to other SI units simply by multiplying or dividing by a multiple of 10!

### What are multiples of 10?

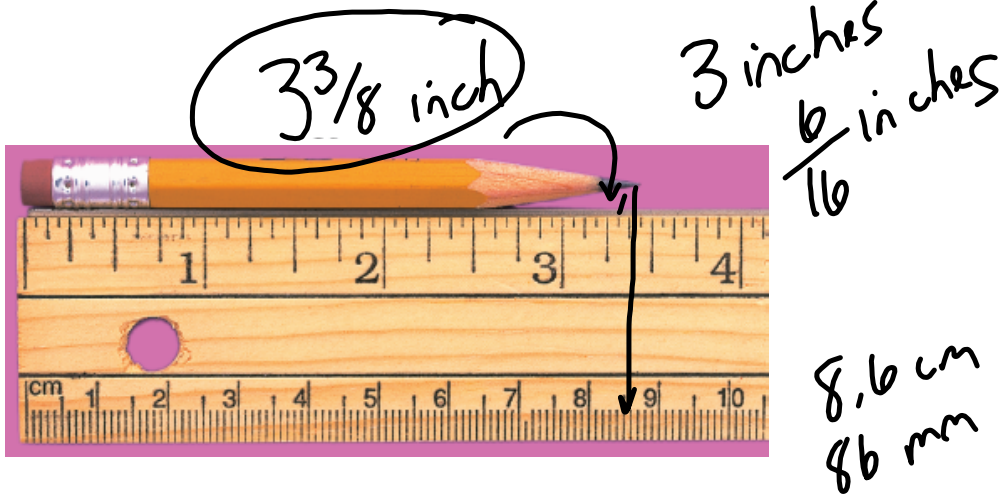
**TABLE 1.5 Selected Prefixes Used in the Metric System**

Prefix	Abbreviation	Meaning	Example
Giga	G	$10^9$	1 gigameter (Gm) = $1 \times 10^9$ m
Mega	M	$10^6$	1 megameter (Mm) = $1 \times 10^6$ m
Kilo	k	$10^3$	1 kilometer (km) = $1 \times 10^3$ m
Deci	d	$10^{-1}$	1 decimeter (dm) = 0.1 m
Centi	c	$10^{-2}$	1 centimeter (cm) = 0.01 m
Milli	m	$10^{-3}$	1 millimeter (mm) = 0.001 m
Micro	$\mu^a$	$10^{-6}$	1 micrometer ( $\mu$ m) = $1 \times 10^{-6}$ m
Nano	n	$10^{-9}$	1 nanometer (nm) = $1 \times 10^{-9}$ m
Pico	p	$10^{-12}$	1 picometer (pm) = $1 \times 10^{-12}$ m
Femto	f	$10^{-15}$	1 femtometer (fm) = $1 \times 10^{-15}$ m

<sup>a</sup>This is the Greek letter mu (pronounced "mew").



To measure the length of an object, first determine the smallest indicated unit by counting the number of divisions between two adjacent inch marks. The ruler below has ? divisions between two adjacent inch marks



The pencil point is closest to ?



A fraction of an imperial measure of length is usually written in fraction form, not decimal form.

1.1 Imperial Measures of Length

# HOME *work* assignment...

Assignment - Measuring in an Imperial System.pdf

1 foot = 12 inches

## Attachments

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Assignment - Measuring in an Imperial System.pdf