MATH 10C FORMULA SHEET

Measurement

Relationships between common Imperial Units	Relationships between Common Imperial Units and Metric Units	
Length	**1 inch = 2.54 cm**	**1 cm = 0.3937 inches**
1 mile = 1760 yards = 5280 feet	**1 mile = 1.609 km**	**1 km = 0.6214 miles**
1 yard = 3 feet = 36 inches	**1 yard = 0.9144 m**	**1 m = 1.0936 yards**
1 foot = 12 inches	**1 foot = 0.3048 m**	**1 m = 3.2808 feet**

Surface Area

Sphere SA = $4\pi r^2$

Cylinder SA = $2\pi r^2 + 2\pi rh$

Cone SA = $\pi r^2 + \pi rs$

Volume

Sphere V = $4/3\ \pi r^3$
Cone V = $1/3\ \pi r^2 h$
Cylinder V = $\pi r^2 h$

Prism V =B*h where B is the area of the base

Pyramid V = (B * h) / 3

Relations and Functions

General Form of a Line
Ax + By + C = 0

Slope intercept Form of a Line
y= mx +b

Point Slope Form of a Line
$(y-y_1) = m(x - x_1)$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

Window Settings Format
X =[xmin, xmax, xscl]
Y= [ymin, ymax, yscl]

Trigonometry

Pythagorean Theorem
$a^2 + b^2 = c^2$

Trig Ratios

$$\sin A = \frac{opposite}{hypotenuse}$$

$$\cos A = \frac{adjacent}{hypotenuse}$$

$$\tan A = \frac{opposite}{adjacent}$$