

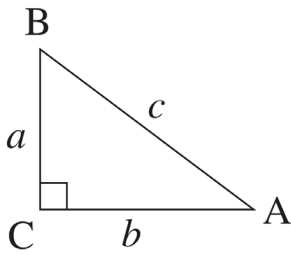
Nova Scotia Examination

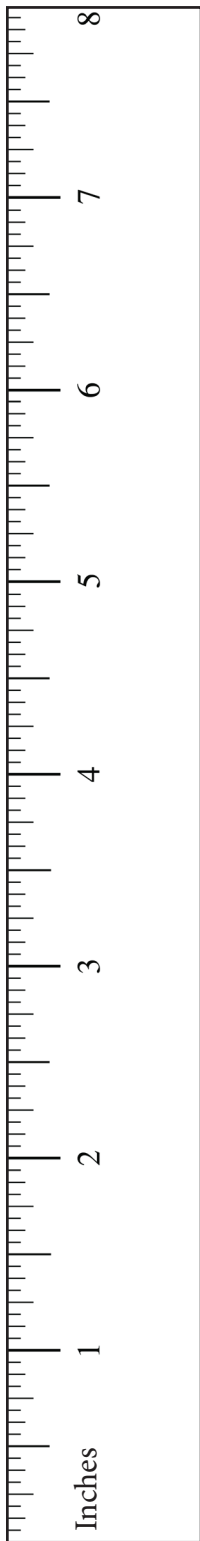
# Mathematics 10

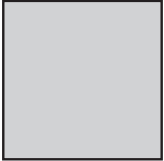
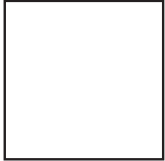

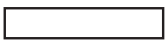


Formula Booklet


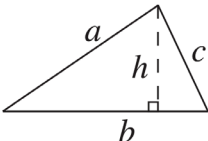
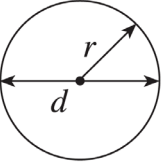


<b>MEASUREMENT</b>			
	<b>Common Imperial</b>	<b>Imperial and SI</b>	<b>SI</b>
<b>Length</b>	1 mile = 1760 yards	1 mile = 1.609 km	1 km = 1000 m
	1 yard = 3 feet	1 yard = 0.9144 m	1 m = 100 cm
	1 foot = 12 inches	1 foot = 30.48 cm	1 cm = 10 mm
		1 inch = 2.54 cm	
<b>Common Abbreviations</b>	mile ↔ mi.		kilometre ↔ km
	yard ↔ yd.		metre ↔ m
	feet ↔ ' or ft.		centimetre ↔ cm
	inch ↔ " or in.		millimetre ↔ mm
	ton ↔ tn.		
	pound ↔ lb.		
	ounce ↔ oz.		

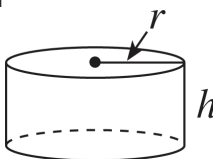
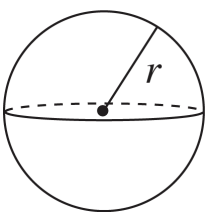
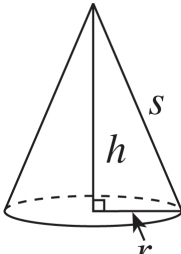
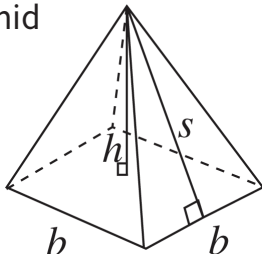
<b>TRIGONOMETRY</b>		
<b>Reminder:</b> Put your calculator in degree mode.		
$\sin \theta = \frac{\text{opposite}}{\text{hypotenuse}}$	$\cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}}$	$\tan \theta = \frac{\text{opposite}}{\text{adjacent}}$
<b>Pythagorean Theorem</b>		
$a^2 + b^2 = c^2$		
		

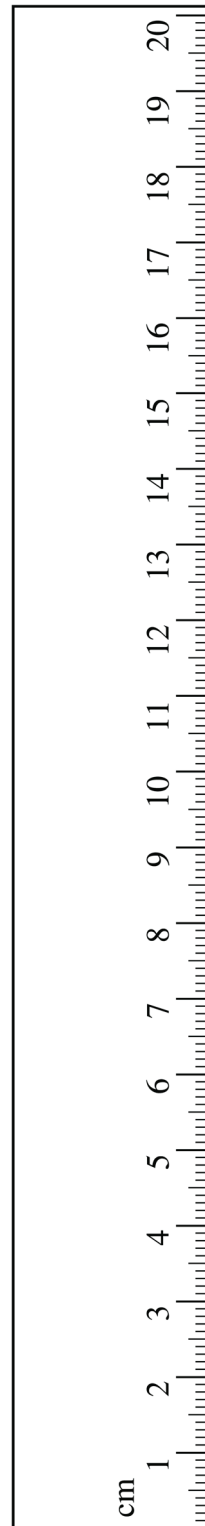


MATH TILES LEGEND	LINEAR FUNCTIONS
 $+x^2$  $-x^2$	Linear equations    The slope of a line $y = mx + b$ $m = \frac{y_2 - y_1}{x_2 - x_1}$ $Ax + By + C = 0$ $y - y_1 = m(x - x_1)$
 $+x$  $-x$	distance = speed $\times$ time
 $+1$  $-1$	

GEOMETRIC FIGURE	PERIMETER	AREA
Rectangle 	$P = 2l + 2w$	$A = lw$
Triangle 	$P = a + b + c$	$A = \frac{bh}{2}$
Circle 	$C = 2\pi r$	$A = \pi r^2$

**NOTE:** Use the value of  $\pi$  programmed in your calculator rather than the approximation of 3.14.

GEOMETRIC SOLID	SURFACE AREA	VOLUME
Cylinder 	$SA = 2\pi r^2 + 2\pi rh$	$V = (\text{area of base}) \times h$
Sphere 	$SA = 4\pi r^2$	$V = \frac{4}{3}\pi r^3$
Cone 	$SA = \pi r^2 + \pi rs$	$V = \frac{1}{3} \times (\text{area of base}) \times h$
Right Square-Based Pyramid 	$SA = 2bs + b^2$	$V = \frac{1}{3} \times (\text{area of base}) \times h$
General right prism	$SA = \text{the sum of the area of all the faces}$	$V = (\text{area of base}) \times h$
General right pyramid	$SA = \text{the sum of the area of all the faces}$	$V = \frac{1}{3} \times (\text{area of base}) \times h$



**NOTE:** Use the value of  $\pi$  programmed in your calculator rather than the approximation of 3.14.





