Chapter 2 Foldable

Linear Conversions

Imperial Unit	SI Unit
1 in.	2.54 cm
1 ft	30.48 cm
1 ft	0.305 m
1 yd	0.914 m
1 mi	1.609 km

SI Unit	Imperial Unit
1 cm	0.394 in.
1 m	1.094 yd

If I know the dimensions of an area in one unit, I can convert the area to another unit by

Surface Area Formulas

$A = s^2$

$A = lw$

$A = \pi r^2$

$SA_{prism} = 2lw + 2lh + 2wh$

$SA_{cylinder} = 2\pi r^2 + 2\pi rh$

$SA_{cone} = \pi r^2 + \pi rs$

$s^2 = r^2 + h^2$

$SA_{pyramid} = lw + ls + ws$

$SA_{sphere} = 4\pi r^2$

Volume Conversions

SI Unit	Imperial Unit
1 cm³	1 mL
1000 cm³	1 L

If I know the dimensions of a volume in one unit, I can convert the volume to another unit by
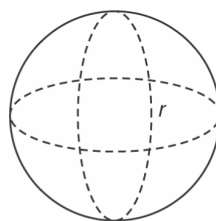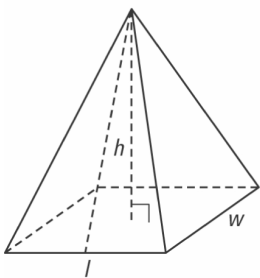
Volume Formulas

$V = Bh$

$V_{prism} = lwh$
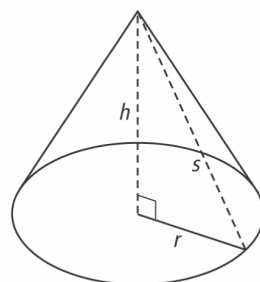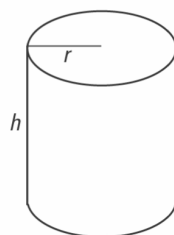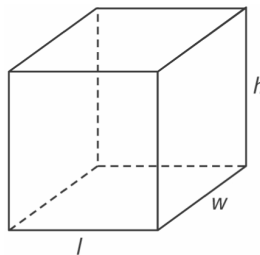
$V_{cylinder} = \pi r^2 h$

$V_{cone} = \frac{1}{3}\pi r^2 h$

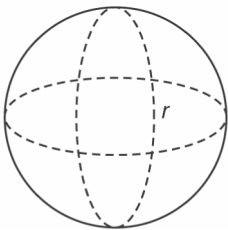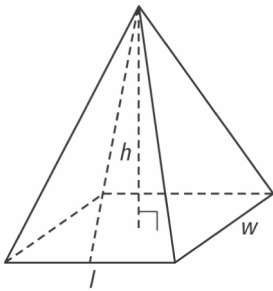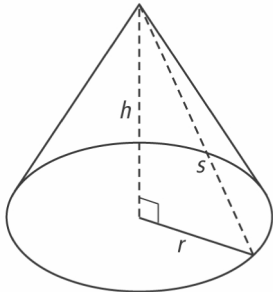$V_{pyramid} = \frac{1}{3}lwh$

$V_{sphere} = \frac{4}{3}\pi r^3$

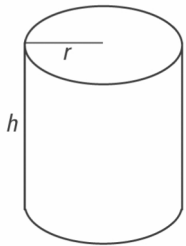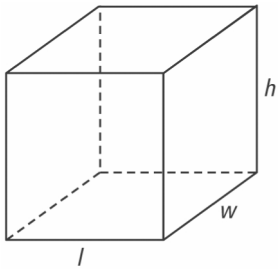**Surface Area:**

lateral area:

slant height:

Volume:

apex: