MTH125 Exam 2 Formula Sheet

Volume of a sphere $\quad V=\frac{4}{3} \pi r^{3}$
Volume of a cylinder $\quad V=\pi r^{2} h$
Volume of a cone $\quad V=\frac{1}{3} \pi r^{2} h$
Surface area of a sphere $A=4 \pi r^{2}$
Hyperbolic functions $\quad \sinh x=\frac{e^{x}-e^{-x}}{2} \quad \cosh x=\frac{e^{x}+e^{-x}}{2}$
Pythagorean theorem $\quad c^{2}=a^{2}+b^{2}$
Law of cosines

$$
c^{2}=a^{2}+b^{2}-2 a b \cos C
$$



