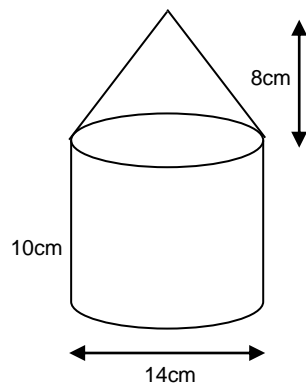


**YEAR 11 MATHEMATICS.  
MODULE 1**

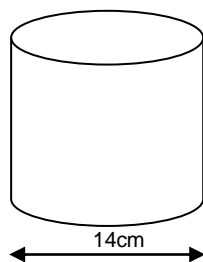
1. Reduce the algebraic fraction  $\frac{-2x^3y}{-8x^2z}$  to lowest terms.
2. Reduce the algebraic fraction  $\frac{xy + 2x}{2x^2 - 5x}$  to lowest terms.
3. Simplify  $\frac{x^2 - y^2}{x^2 + xy}$ .
4. For what values of  $x$  is the expression  $\frac{3x - 1}{x^2 - 8x - 20}$  undefined?

5. The base of a pyramid is a 4.5 m by 2.5 m rectangle. The height of the pyramid is 4 m. Calculate its volume.

6. Determine the volume of the figure below correct to the nearest  $\text{cm}^3$ .



7. The cylinder below is open at one end. Determine its total surface area.



8. If a distance of 4 cm is measured as 4.02 cm, find the percentage error.

9. Round off the following to the indicated degree of accuracy:

(a) 146.758 (2 s.f)

(b) 0.4275 (nearest hundredths)

10. Round off the following to the indicated degree of accuracy:

(a) 185.457 (2 d.p.)

(b) 0.0040758 (3 s.f.)

[Click for answers](#)

