19th July

**Simplify**

\[
\frac{2a + 12}{a^2 - 36}
\]

**Tom is calculating the perimeter of the sector.**

Can you spot any mistakes?

There are red, green, pink and white counters in a box.
There are an equal number of red and white counters.
There are ten times more green than white counters.
There are twice as many red than pink counters.

Jim takes a counter at random from the box.
Work out the probability than Jim takes a green counter.

A cylinder has radius \( y \) cm and height \( 2y \).
Write an expression for the volume of the cylinder.