In June 2011, the population of a country was 23 million. By June 2012, the population had increased by 4%.

Work out the population in June 2012.

A is inversely proportional to B cubed.

When $A = 250$, $B = 5$.

Find $A$ when $B = 3$.

Find in terms of $a$ and $b$

$OC$

$FC$

Simplify fully

\[
\frac{v + 3}{15} \div \frac{v^2 + 3v}{25}
\]

Angle $AOB$ is $160^\circ$. Calculate the perimeter of the sector shown.