7th December

Given
\[ f(x) = \frac{2x + 4}{3} \]
find
\[ f^{-1}(x) \]

Rebecca has 9 cards, each with a number on it.

\[2\quad 2\quad 3\quad 4\quad 5\quad 6\quad 6\quad 7\quad 9\]

She picks two cards at random, without replacement.
Rebecca multiplies the two numbers to get a score.
Calculate the probability that the score is an even number

Write in the form \( a(x + b)^2 + c \)
\[3x^2 - 12x + 41\]

Prove that the angle at the centre is twice the angle at the circumference.