## Starting Six

What is the coordinate for the turning point of $y=x^{2}-2 x-4$

Solve these simultaneous equations:

$$
\begin{gathered}
4 x+6 y=5 \\
7 x+5 y=-10.5
\end{gathered}
$$

Simplify the algebraic fraction:

$$
\frac{2 x^{2}-24 x+22}{x^{2}-121}
$$

Prove algebraically that the difference between the squares of any two consecutive integers is always odd.

Make x the subject of the formula:

$$
\mathrm{q}=\frac{y p-x m}{3 x+k}
$$

$$
f(x)=3 x^{2} \text { and } g(x)=\frac{1}{x-2}
$$

Find: $g f(4)$

Find: $g^{-1}(x)$

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