



National 5 - Home Ex 4
NON CALCULATOR!!
Remember to show ALL working

1. Express $x^2 - 6x + 7$ in the form $(x + p)^2 + q$

2. Write each of the following as a single fraction

(a) $\frac{3}{4x} - \frac{2}{x^2}$

(b) $\frac{5}{9y} \times \frac{2}{y-5}$

(c) $\frac{9}{2x^2+4} \div \frac{3}{x^2+2}$

(d) $\frac{x+3}{x-3} \times \frac{x^2-9}{6x+18}$

3. Express $10 - 4x - x^2$ in the form $a(x + b)^2 + c$

4. Write the following in their simplest form

(a) $\frac{(3x+2)(2x-1)}{(3x-2)(3x+2)}$

(b) $\frac{(4x-4)^2(x-1)}{(x-1)^5(4x-1)^4}$

(c) $\frac{2x^2-50}{3x-15}$

(d) $\frac{x^2-3x-4}{3x^2-48}$

5. Express $x^2 + 3x$ in the form $a(x + b)^2 + c$

End of Exercise



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