**MISS EASTES
MATHEMATICS**
Gr 12 Revision Course

<u>Calculus</u>
<u>Differentiation questions</u>
<u>There is one rule and one rule only</u>:
You need separate terms to differentiate!

<u>**Determine**</u>: $\dfrac{dy}{dx}$

1. $y = \dfrac{4}{\sqrt{x^4}} - \dfrac{3}{\sqrt[3]{x^2}} + 2x$

2. $y = \dfrac{x^2 - 3x + 4}{x^{-2}.\sqrt{x}}$

3. $y = \left(\dfrac{2}{x} + 2\sqrt{x}\right)^2$

4. $y = \dfrac{x^2 - x - 6}{x - 3}$