C3 - Chapter I - Algebraic fractions - Summary

- * Reminder
 - O The degree of an expression is the greatest power of x

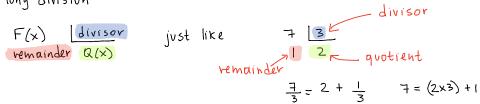
eg
$$-3x^2 + 2$$
 is of degree 2
 $(x+2)^2(x+3)$ is of degree 3

2 A fraction is improper if the degree of the numerator is greater than or equal to the degree of the denominator

e.g.
$$\frac{x+1}{x+2}$$
 is improper $\frac{x^2+3x}{x-1}$ is improper $\frac{x^2-5}{x^3+2x}$ is proper

* Any polynomial F(x) can be put in the form

If we use long division



- * You can solve questions either by long division or by equating coefficients.

 You can choose what method to use unless the question asks for a specific method.
- * Always remember to write your final answer in the required form