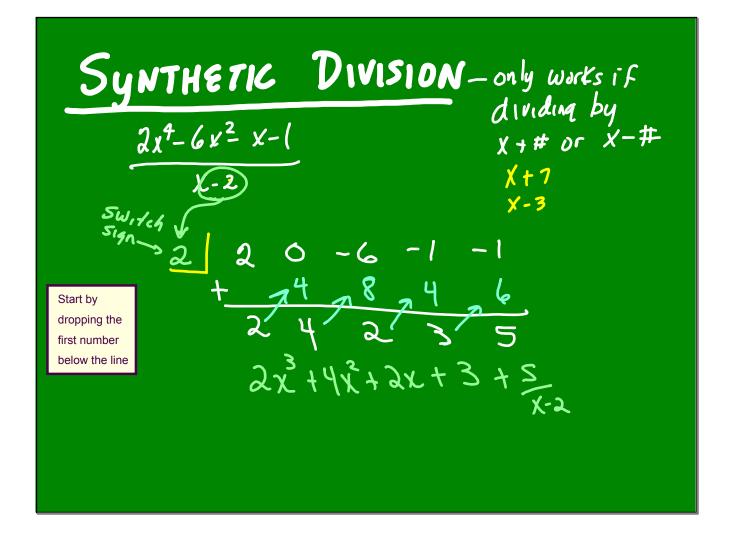
DIVIDING Polynomials

$$2x^{4}-6x^{2}-x-1$$
 $2x^{4}-6x^{2}-x-1$
 $2x^{4}-6x^{2}-x-1$
 $2x^{4}-6x^{2}-x-1$
 $2x^{4}-6x^{2}-x-1$
 $2x^{2}+4x^{2}+2x+3+x-2$
 $2x^{2}+4x^{2}+2x+3+x-2$
 $2x^{2}+4x^{3}+6x^{2}-x-1$
 $2x^{2}+4x^{3}+8x^{2}-x$
 $2x^{2}-x$
 $2x^{2}+4x$
 $2x^{2}-x$
 $2x^{2}+4x$
 $2x^{2}-x$
 $2x^{2}+4x$
 $3x^{2}-x$
 $2x^{2}+4x$
 $3x^{2}-x$
 $2x^{2}+4x$



FUNCTION OPERATIONS

Composition of Functions - Function in a function

$$f(x) = 3x + 2 \quad g(x) = x^2 + 2x + 4 \quad h(x) = \frac{3x^2 + 2}{x^2 - 1} \quad K(x) = \sqrt{2x + 1}$$

$$f(g(x)) = (f \circ g)(x)$$

$$f \circ f g \circ f \times$$

$$f(g(x)) = (a) = a^2 - 2(a) + 4$$

$$= (4) = 3(4) + 2$$

$$= (14)$$

$$f(x) = 3x + 2 g(x) = (x^{2} - 2x + 1) h(x) = \frac{3x^{2} + 2}{x^{2} - 1} K(x) = \sqrt{2x + 1}$$

$$= 3(x^{2} - 2x + 1) + 2$$

$$= 3x^{2} - 6x + 12 + 2$$

$$= 3x^{2} - 6x + 14$$

$$= 3(2x + 1) + 2$$

$$= 2x + 1 + 2$$

$$= 2x + 1 + 2$$

$$= 6x + 3 + 2$$

$$= 6x + 5$$

$$= 6x + 5$$