Long Division

.|15

Divide: Show Work

$$1875 \div 25$$

Divide: Use Long Division

Dividend

$$\left(x^3-2x^2-5x+6\right)\div\left(x+2\right)$$

Divisor

$x+2 \overline{)\, x^3-2x^2-5x+6}$

x^2-4x+3

$-x^3+2x^2$

$-4x^2-5x$

$+4x^2+8x$

$3x+6$

$-3x+6$

0

① Standard form & Make sure all of the terms are there

② What do we Multiply times x to get x^3

③ Multiply

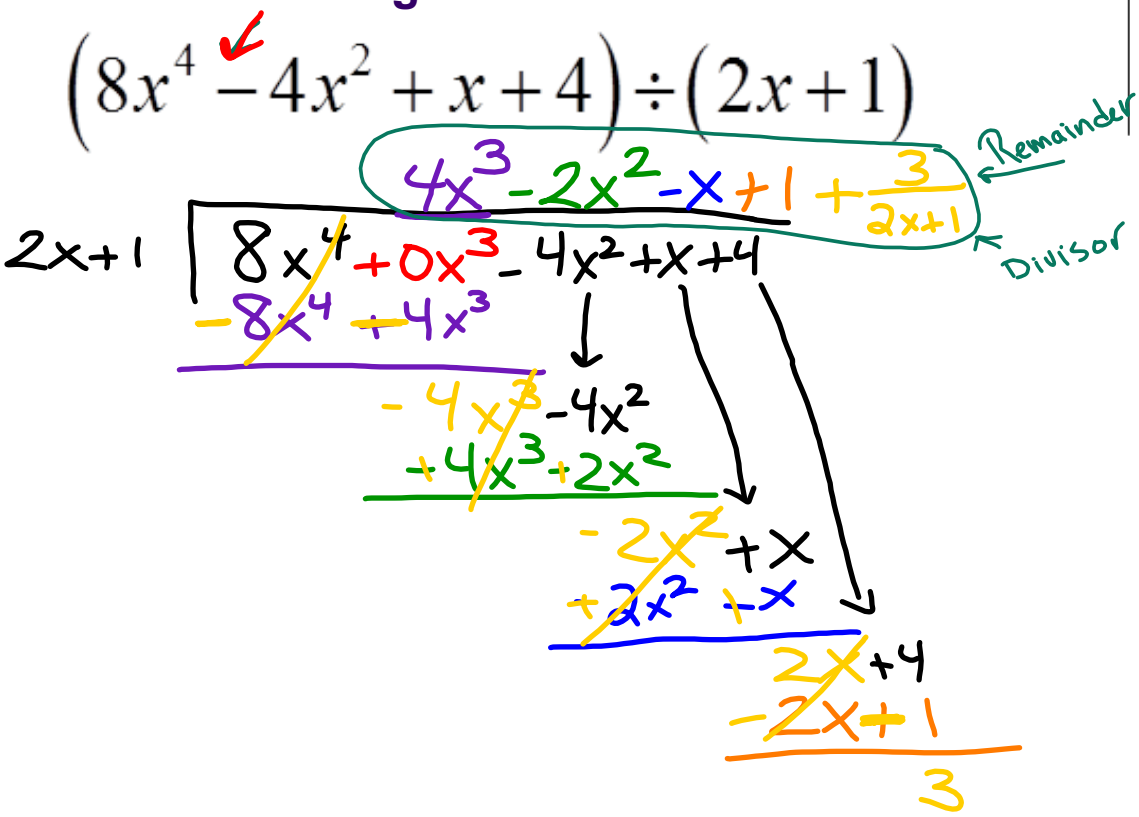
④ Change signs & add (collect like terms)

⑤ Bring down the next term

Repeat #2-5

Divide: Use Long Division

$$\left(8x^4-4x^2+x+4\right)\div\left(2x+1\right)$$



Divide: Use Long Division

$$\left(x^2+3x-9\right)\div\left(-x+5\right)$$

$$-x+5\overline{)\,x^2+3x-9}$$

$$-x-8+\frac{31}{-x+5}$$

$$-x^2+5x$$

$$-8x-9$$

$$+8x-40$$

$$31$$

HW 1-4, 15-22