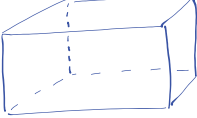


$$\frac{3x^4 + 18x^3 - 3x + 40}{x+2} = 3x^3 + 12x^2 - 24x + 40 - \frac{50}{x+2}$$

HW Ex: 
 base area = $x^2 - 3x$
 Volume = $x^3 - 9x$
 height = ?

height : $= \frac{x^3 - 9x}{x^2 - 3x} = \frac{\cancel{x}(x^2 - 9)}{\cancel{x}(x - 3)}$
 $= \frac{x^2 - 9}{x - 3} = \frac{(x - 3)(x + 3)}{\cancel{x - 3}} = \boxed{x + 3}$

Oct 27-10:56 AM

HW Ex: $x \cdot 8$

$$\begin{array}{r} 25x^2 + 10x + 1 \overline{) 25x^3 - 190x^2 - 79x - 8} \\ \underline{-25x^3 - 10x^2 - x} \\ -200x^2 - 80x - 8 \\ \underline{+200x^2 + 80x + 8} \\ 0 \end{array}$$

$$\frac{25x^3 - 190x^2 - 79x - 8}{25x^2 + 10x + 1} = \boxed{x - 8}$$

height : $\frac{25x^3}{25x^2} = x$
 $\frac{-200x^2}{25x^2} = -8$
 $=$

Oct 27-11:13 AM