

Wednesday - December 11, 2013

81

$$4m^2 - 121$$

$$2m \quad ||$$

$$(2m+11)(2m-11)$$

$$\textcircled{42} \quad \frac{4}{(m+3)} = \frac{6}{(m-3)}$$

$$\begin{array}{r} 6m+18 = 4m-12 \\ -4m \quad -4m \\ \hline 2m+18 = -12 \end{array}$$

$$\begin{array}{r} 2m+18 = -12 \\ -18 \quad -18 \\ \hline 2m = -30 \\ \frac{2m}{2} = \frac{-30}{2} \\ m = -15 \end{array}$$

$$\textcircled{3^3} \quad (3x^3 - 3) \div (x-1)$$

$$\begin{array}{r|rrrr} 1 & 3 & 0 & 0 & -3 \\ & & 3 & 3 & 3 \\ \hline & 3 & 3 & 3 & 0 \end{array}$$

qm linen const rem

$$\boxed{3x^2 + 3x + 3} + \frac{0}{x-1}$$

$$\textcircled{2 \cdot 2 \cdot 2 \cdot 3} \quad (2x^3 - x^2 - 13x - 6) \div (x-3)$$

$$\begin{array}{r} \boxed{2x^2 + 5x + 2} + \frac{0}{x-3} \\ x-3 \overline{) 2x^3 - x^2 - 13x - 6} \\ \underline{-(2x^3 - 6x^2)} \\ 5x^2 \\ \underline{-(5x^2 - 15x)} \\ 2x \\ \underline{-(2x - 6)} \\ 0 \end{array}$$

2.3³

$$\frac{8b^2 - 4b}{3b^2} \div \frac{2b-1}{9b}$$

$$\frac{(8b^2 - 4b) \cdot 9b}{3b^2 \cdot (2b-1)}$$

$$\frac{4b \cancel{(2b-1)} \cdot 9b}{3b^2 \cancel{(2b-1)}} \quad \boxed{12}$$

$$y = \log_2(x+700)$$

$$D: (-700, \infty)$$