

Home

Realtor

Algebra ALEKS Topics

Algebra Notes

Algebra Reviews

MAT0028

MAC1105

MGF ALEKS Topics

MGF Reviews

MGF Notes

STA2023

Stats ALEKS Topics

Stats Notes

Stats Reviews

Algebra / Polynomial long division: Problem type 1

$$(2x^2 + 12x + 20) \div (2x + 6)$$

$$\begin{aligned} 2x \cdot x &= 2x^2 \\ 2x \cdot 3 &= 6x \end{aligned}$$

$$\text{Quotient: } x + 3$$

$$\text{Remainder: } 2$$

$$\begin{array}{r} x + 3 \\ 2x+6 \overline{) 2x^2 + 12x + 20} \\ \underline{-2x^2 + 6x} \\ 6x + 20 \\ \underline{-6x + 18} \\ 2 \end{array}$$

$$\begin{array}{r} 32 \\ 14 \overline{) 452} \\ \underline{-42} \\ 32 \\ \underline{-28} \\ 4 \end{array}$$
$$\begin{aligned} 14 \times 3 &= 42 \\ 14 \times 2 &= 28 \end{aligned}$$
$$\begin{aligned} \text{Quotient: } 32 \\ \text{Remainder: } 4 \end{aligned}$$

Be careful subtracting!

$$\begin{aligned} -(2x^2 + 6x) &= -2x^2 - 6x \\ -(6x + 18) &= -6x - 18 \end{aligned}$$

$$\begin{array}{r} 4x - 5 \\ x+2 \overline{) 4x^2 + 3x - 6} \\ \underline{-4x^2 + 8x} \\ -5x - 6 \\ \underline{+5x + 10} \\ 4 \end{array}$$

$$\text{Quotient: } 4x - 5$$

$$\text{Remainder: } 4$$

$$\textcircled{1a} x \cdot 4x = 4x^2$$

$$\textcircled{1b} 4x(x+2) = 4x^2 + 8x$$

$$\textcircled{1c} -(4x^2 + 8x) = -4x^2 - 8x$$

$$\textcircled{1d} \begin{array}{r} 4x^2 + 3x \\ -4x^2 - 8x \\ \hline -5x \end{array}$$

Start process over

$$\textcircled{2a} x \cdot -5 = -5x$$

$$\textcircled{2b} -5(x+2) = -5x - 10$$

$$\textcircled{2c} -(-5x - 10) = 5x + 10$$

Tags Archive RSS feed Youtube QR Code email akennon@fscj.edu with any issues on this website

Made with Montaigne and bigmision 