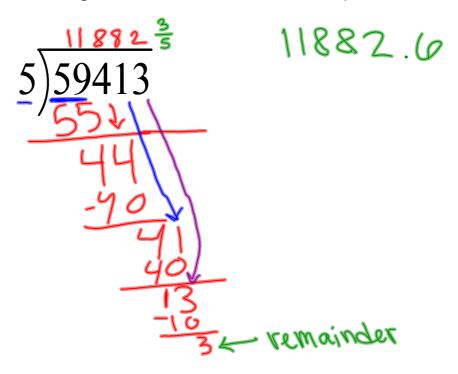
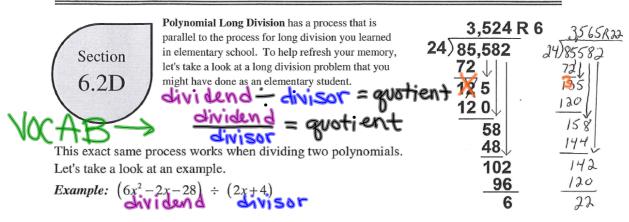
Warm Up.

Use long division to find the quotient.



6.2D Polynomial Division: Part I

Page 108



5)

Step by step method of Long Division

1)	Consider both the leading terms of the					
1)	dividend and divisor.					

Divide the leading term of the dividend by the leading term of the divisor.

Description of step

3) Place the partial quotient on top.

$$\underbrace{2x+4)\underline{6x^2-2x-28}}$$

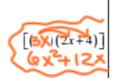


A) Now take the partial quotient you placed on top,
$$3x$$
, and distribute into the divisor $(2x + 4)$.

Position the product of (3x) and (2x + 4) under the dividend.

Make sure to align them by similar terms.

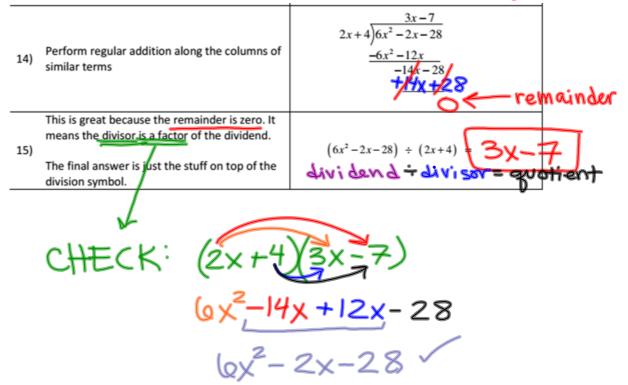
$$2x+4)6x^2-2x-28$$



6)	Performing subtraction will switch the signs of the bottom polynomial.	$ \begin{array}{c} 3x \\ 2x+4 \overline{\smash{\big)}6x^2 - 2x - 28} \\ - \overline{\smash{\big)}6x^2 + 12x} \end{array} $
7)	Proceed with regular addition vertically. Notice that the first column from the left cancels each other out. Nice!	$ \begin{array}{c c} 3x \\ 2x+4 & -2x-28 \\ -1 & -12x \\ -14x \end{array} $
8)	Carry down the next adjacent "unused" term of the dividend.	$ \begin{array}{r} 3x \\ 2x+4{\overline{\smash{\big)}}}6x^2-2x-28 \\ \underline{-6x^2-12x} \\ -14x-2 \end{array} $

9)	Next, look at the bottom polynomial, -14x-28, take its leading term which is -14x and divide it by the leading term of the divisor, 2x.	$ \begin{array}{r} 3x = 7 \\ 2x + 4 \overline{\smash{\big)}\ 6x^2 - 2x - 28} \\ \underline{-6x^2 - 12x} \\ \underline{-14x - 28} \end{array} $	<u>{</u> = -7}
10)	Again, place the partial quotient on top.		
11)	Use the partial quotient that you put up, -7 , and distribute into the divisor. Seeing a pattern now?	$ 3x = 7 $ $ 2x + 4 \overline{\smash{\big)}\ 6x^2 - 2x - 28} $ $ -6x^2 - 12x $	
12)	Place the product of -7 and the divisor below as the last line of polynomial entry.	-14x - 28	3
13)	Performing subtraction will switch the signs of the bottom polynomial.	$ \begin{array}{r} 3x - 7 \\ 2x + 4 \overline{\smash{\big)}6x^2 - 2x - 28} \\ \underline{-6x^2 - 12x} \\ -14x - 28 \end{array} $	

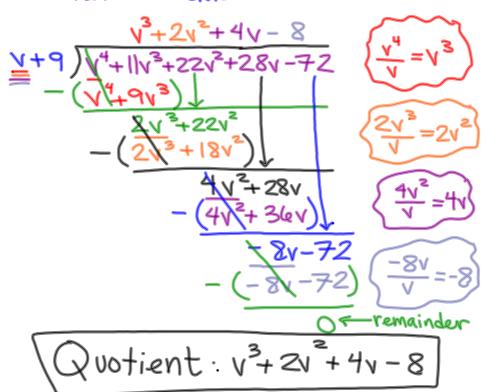
Page 109



Page 113

1)
$$(v^4 + 11v^3 + 22v^2 + 28v - 72) \div (v+9)$$

2)
$$(x^3 - x^2 - 60x + 32) \div (x - 8)$$



#1 – 12: Divide the following polynomials.

11)
$$\frac{(x^{3}-7x^{4}+21x^{3}+22x^{2}-9x-18)}{x^{2}+x-3}$$

$$\frac{(12)}{7n^{2}-5/n} \frac{(7n^{4}-51n^{3}-53n^{2}+300n+18)}{n^{2}-6}$$

$$\frac{(7n^{4}-51n^{3}-53n^{2}+300n+18)}{n^{2}-6}$$

$$\frac{(7n^{4}-51n^{3}-53n^{2}+300n+18)}{n^{2$$

Quotient: 7n2-51n-11-6n-48

UNIT 6: Intermediate Algebra B	Name:	Peri	od:
h44 // l l-12 /D /15021			

http://www.anoka.k12.mn.us/Page/15931

Use this guide to help you evaluate where you are at in this chapter, and identify areas that you need extra help in.

D=Proficient (you are awesome at this). D=Middle (you need some improvement)

D=Not Proficient (HELP!)

Intermediate Algebra Unit 6 : Solving Polynomial functions							
Date Covered	LT Letter	Learning Target (LT) (What you should know)	Practice Problems	Number of Test Questions/Points	Self-Evaluation (Do you know it?)		
5/1	6.1 A & 6.1 B	I graph polynomial functions and identify the significant features of the graph.	6.1 A #1, 4-6 (P-77) 6.1 B #1-13 (P-83)		8	⊜	٥
514 515	6.2 A		6.2 A #1-15 (P-93)	+ w.s.(gr	8 Teen	(©
516	6.2 B & 6.2C	I can demonstrate understanding of operations with polynomials.	6.2 B #3-15(odds), 21, 22 (P-95) 6.2 C #2-22(evens)		8	⊜	٥
5/7	6.2 D		6.2 D #1.0 #1 (P-105)	1,4,5,6	97	⊜	0
518	6.2 E		6.2 E #1-7, 12, 13 (P-109)				