

April 30, 2012

Get out your homework

Algo 1



4/30 - Greatest Common Monomial Factors

A GCF is **Greatest Common Factor**
The biggest # that goes into the given #'s.

$$12^{\overline{4}} \quad 21^{\overline{7}} \quad 18^{\overline{6}} \quad \text{GCF} = 3$$

$$20 \quad 16 \quad 24 \quad \text{GCF} = 4$$

$$2n \quad 4 \quad 8n^2 \quad \text{GCF} = 2$$

$$6x^2 \times \times \quad 9x^3 \times \times \times \quad 15x \times \quad \text{GCF} = 3x$$

GCMF

$8n^2 + 2n + 4$	2
$9x^3 + 6x^2 + 15x$	$3x$
$4a^3 - 8a^2 - 20a$	$4a$
$18u^5 - 12u^3 + 24u$	$6u$

Rewrite each as the GCMF multiplied by the left-over polynomial

$$\underline{8n^2} + \underline{2n} + \underline{4} = 2(4n^2 + n + 2)$$

$$\underline{9x^3} + \underline{6x^2} + \underline{15x} = 3x(3x^2 + 2x + 5)$$

$$\frac{\cancel{4}a^3}{\cancel{4a}} - \frac{\cancel{8}a^2}{\cancel{4a}} - \frac{\cancel{20}a}{\cancel{4a}} = 4a(a^2 - 2a - 5)$$

$$18u^5 - 12u^3 + 24u = 6u(3u^4 - 2u^2 + 4)$$

Factor out the common factor. Make sure the answer is in descending order of powers

$$54x^4 + 81x^3 - 18x = 9x(6x^3 + 9x^2 - 2)$$

$$-80b^2 - 30b - 100 = 10(-8b^2 - 3b - 10)$$

$$\underline{20b} + \underline{20b^2} + \underline{12b^6} = 4b(3b^5 + 5b + 5)$$

$$\underline{35n^5} + \underline{7n^4} + \underline{70n^8} = 7n^4(10n^4 + 5n + 1)$$

Homework

Green Miscellaneous WS I

Due Tuesday