**Unit 3 – HW# 2(Due Wednesday March,4)**

**Factor each expression completely (or state “prime”). \*\* Only 1 answer is prime \*\***

- **Always** check for GCF first (you may not have one, but check!!)

**Factoring strategies**

- 2 terms: Try DOTS (Difference of Two Squares)

- 3 terms: Is it a perfect square trinomial? If not, try regular “sum and product” grouping

- 4 terms: try grouping

- If any exponents are left in parentheses, can I factor some more??

- If ***nothing works****,* state “prime”

1.)$ 16x^{2}-169$ 2.) $45abx^{2}-5ab$ 3.) $64x^{2}-48x+9$ 4.) $b^{4}-81$

5.) $2t^{3}+32t^{2}+128t$ 6.) $x^{2}+2x+10$ 7.) $4x^{5}-4x^{3}$ 8.) $6a^{2}+11ab-35b^{2}$

**Solve the equations (find the roots) by factoring**

9.) X2 + 11X + 24 =0 10.) 2X2 + X -10 = 0 11.) –X2 + 9x 12.) X2 -15 X + 54 =0

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