

## Chapter 4 - Factoring Day 5 Wks

**Review**

- 0) If there's an =; make it  $\boxed{=0}$
- 1) GCF
- 2) If  $a=1$ ; basic factors
- 3) If  $a \neq 1$ ; AC Method
- 4) If  $=0$ ; solve for  $x$

## Chapter 4 - Factoring Day 5 Wks

## Alg. Review

## Review

$$20) (3y+21)(2y+5)$$

$$6y^2 + 15y + 42y + 105$$

$$(6y^2 + 57y + 105)$$

## Chapter 4 - Factoring Day 5 Wks

**Review**

Day 1

$$15) 12x^3 - 18x^2y + 2xy^2$$

$$2x(6x^2 - 9xy + y^2)$$

$$32) x^2 - 6x - 27$$

$$(x-9)(x+3)$$

## Chapter 4 - Factoring Day 5 Wks

**Review**

Day 2

25)  $6x^2 + x - 2$

$A \cdot C = 6 \cdot -2 = -12$

$6x^2 + 4x - 3x - 2$

$2x(3x+2) - 1(3x+2)$

$(3x+2)(2x-1)$

## Chapter 4 - Factoring Day 5 Wks

Review

Day 2

$$29) 4x^2 + 9x + 5$$

$$AC = 20$$

$$4 \quad 5$$

$$4x^2 + 4x + 5x + 5$$

$$4x(x+1) + 5(x+1)$$

$$(x+1)(4x+5)$$

## Chapter 4 - Factoring Day 5 Wks

Review

Day 3

$$22) \quad 7x^2 - 3x - 10 = 0$$

$$AC = -70$$

$$\begin{array}{c} \wedge \\ -10 \quad 7 \end{array}$$

$$7x^2 - 10x + 7x - 10 = 0$$

$$x(7x - 10) + 1(7x - 10) = 0$$

$$(7x - 10)(x + 1) = 0$$

$$7x - 10 = 0$$

$$x = \frac{10}{7}$$

$$x + 1 = 0$$

$$x = -1$$

## Chapter 4 - Factoring Day 5 Wks

Review

Day 3

$$27) 4x^2 - 17x + 15 = 0$$

$$AC = 60$$

$$\begin{array}{c} \text{^} \\ \textcircled{-12 \quad -5} \end{array}$$

$$-6 \quad -10$$

$$-3 \quad -20$$

$$4x^2 - 12x - 5x + 15 = 0$$

$$4x(x-3) - 5(x-3) = 0$$

$$(x-3)(4x-5) = 0$$

$$x = 3$$

$$x = \frac{5}{4}$$

## Chapter 4 - Factoring Day 5 Wks

**Review**

Day 4

$$24) \quad 2x^2 + 10x + 318 = 4x - 4x$$

$\quad \quad \quad -4x \quad \quad \quad -4x$

$$2x^2 + 6x + 318 = 0$$

$$2(x^2 + 3x + 159) = 0$$

1 159  
3 53

not factorable



## Chapter 4 - Factoring Day 5 Wks

**Review**

Day 4

$$32) \quad r^2 + 17r + 60 = 0$$

$$(r+12)(r+5) = 0$$

12   5

$$\boxed{r = -12} \quad \boxed{r = -5}$$

## Chapter 4 - Factoring Day 5 Wks

**Review**

Day 4

$$29) 3n^4 - 147n^2 = 0$$

$$3n^2(n^2 - 49) = 0$$

$$3n^2(n^2 - 7^2) = 0$$

$$3n^2(n+7)(n-7) = 0$$

$$\frac{3n^2}{3} = 0$$

$$\sqrt{n^2} = 0$$

$$n = 0$$

$$n+7=0$$

$$n = -7$$

$$n-7=0$$

$$n = 7$$

## Chapter 4 - Factoring Day 5 Wks

Review

Day 4

$$33) 27x^2 - 48 = 0$$

$$3(9x^2 - 16) = 0$$

$$3((3x)^2 - (4)^2) = 0$$

$$3(3x - 4)(3x + 4) = 0$$

~~3=0~~

$$3x - 4 = 0$$

$$x = \frac{4}{3}$$

$$3x + 4 = 0$$

$$x = -\frac{4}{3}$$