H/W Review p. 587-89

(75) $(3a-4)(2a-9)$

$6a^2-35a+36$

(73) $(3t+5)(t+2)=0$

$3t+5=0$

$3t=-5$

$t=\frac{-5}{3}$

$t+2=0$

$t=-2$

28) $b^2 + 5 = 8b - 10$

$-8b + 10 \quad -8b + 10$

$b^2 - 8b + 15 = 0$

$(b - 3)(b - 5) = 0$

$b = 3$ or $b = 5$

Factoring ax^2+bx+c:

$$(2x+3)(-x-2)=-2x^2-7x-6$$

$2x^2 - 7x + 3$

Factors of 2: 1, 2

Factors of 3: −1, −3

Possibilities | Middle

$(x-1)(2x-3)$ | $-5x$

$(2x-1)(x-3)$ | $-7x$

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

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

$2x^2 - 7x + 3$

F: $-x^2$

O I: $\pm bx$

L: $\pm c$

$$3n^2 + 14n - 5$$

Factors of $3n^2$	Factors of -5	Possibilities	Middle
$n, 3n$	$1, -5$	$(n+1)(3n-5)$	$-2n$
	$-1, 5$	$(n-5)(3n+1)$	$-14n$
		$(n-1)(3n+5)$	$2n$
		$\boxed{(n+5)(3n-1)}$	$14n$

$$3n^2 + 14n - 5$$

$$-4x^2+12x+7=-1\left(4x^2\boxed{-12x}-7\right)$$

$4x^2$	7	possibilities	Middle
$1x, 4x$	$-1, 7$	$(x-1)(4x+7)$	$3x$
$2x, 2x$	$1, -7$	$(x+7)(4x-1)$	$27x$
		$(x+1)(4x-7)$	$-3x$
		$(x-7)(4x+1)$	$-27x$
		$(2x-1)(2x+7)$	$12x$
		$\boxed{(2x+1)(2x-7)}$	$\boxed{-12x}$

$-1(2x+1)(2x-7)$ ✓

$(-2x-1)(2x-7)$ ✓

$$0 = -2y^2 - 5y - 3 = -1(2y^2 + 5y + 3)$$

$2y^2$	3	possibilities	middle
$y, 2y$	$1, 3$	$(y+1)(2y+3)$ ✓	$5y$ ✓
		$(y+3)(2y+1)$	$7y$

$$\boxed{-1(y+1)(2y+3)}$$

what are the factors?

$y = -1, \; y = \frac{-3}{2}$ ← What are the zeros? What are the solutions?

Homework

p. 596, 4-21 (all)
23-37 (odd)