

HW: Worksheet/4-34 even

Warm up:

Factor.

$$1) x^2 + 6x + 5 \quad (x+1)(x+5)$$

$$2) x^2 - 12x + 20 \quad (x-2)(x-10)$$

$$3) x^2 + 13x + 36 \quad (x+4)(x+9)$$

$$4) x^2 - 15x + 56 \quad (x-8)(x-7)$$

1, 56
2, 28
4, 14
7, 8

$$5) n^2 - 10n + 16 \quad (n-8)(n-2)$$

$$(n-2)(n-8)$$

HW Solutions

$$\textcircled{24} \quad h^2 - 14hk + 49k^2$$

$$(h - 7k)^2$$

$$(h - 7k)(h - 7k)$$

$$\begin{array}{r} 149 \\ \dot{7}, 7 \end{array}$$

$$\textcircled{1} \quad p^2 - 14p + 13$$

1, 13

$$(p-1)(p-13)$$

$$\textcircled{2} \quad 64 - 20s + s^2$$

$$s^2 - 20s + 64$$

$$(s-4)(s-16)$$

1, 64
2, 32
4, 16
8, 8

$$\textcircled{14} \quad x^2 - 22x + 72$$
$$(x-4)(x-18)$$

$$\textcircled{10} \quad s^2 - 12s + 40$$

prime

1, 40
2, 20
4, 10
5, 8

1, 72
2, 36
3, 24
4, 18
6, 12
8, 9

$$20 \quad a^2 + 10ab + 24b^2$$

$$(a + 4b)(a + 6b)$$

Factor.

$$\cancel{a^2 + 26ab + 48b^2}$$

$$x^2 + bx + c$$

$$(x \quad)(x \quad)$$

sum = b
product = c

$$z^2 - 4z - 5$$

$$(z - 5)(z + 1)$$

$$x^2 + 2x - 15$$

1,15
3,5

$$(x + 5)(x - 3)$$

$$a^2 - ab - 42b^2$$

$$(a - 7b)(a + 6b)$$

1, 42
2, 21
3, 14
6, 7

$$p^2 + 2p - 360$$

$$(p - 18)(p + 20)$$

$$x^4 - 15x^2y^2 - 16y^4$$

1,16
2,8
4,4

$$(x^2 - 16y^2)(x^2 + y^2)$$

$$(x + 4y)(x - 4y)(x^2 + y^2)$$

Factor.

1) $p^2 + p - 12$

$(p+4)(p-3)$

1, 12
2, 6
3, 4

4) $y^2 - 21y - 72$

$(y-24)(y+3)$

2) $n^2 + 2n - 6$

prime

5) $x^2 - 10xy - 75y^2$

$(x-15y)(x+5y)$

3) $b^2 - 13b - 30$

$(b-15)(b+2)$

6) $(y+3)^2 + 5(y+3) - 24$

$(y+3+8)(y+3-3)$
 $(y+11)(y)$

$y(y+11)$

$x^2 + 5x - 24$

$(x+8)(x-3)$