

Learning Activity – Section 2.4 – Factoring Trinomials

Names: _____

Factor each trinomial, if possible.

1. $a^2 + 8a - 20$

$$(a+10)(a-2)$$

2. $12w^2 - 16w + 5$

$$(6w-5)(2w-1)$$

3. $100y^2 - 140y + 49$

$$(10y-7)(10y-7) \\ = (10y-7)^2$$

4. $2c^2 - 7c - 15$

$$(c-5)(2c+3)$$

5. $x^2 - 12x + 32$

$$(x-4)(x-8)$$

6. $33v^2 - 18v + 2$

prime

7. $m^2 - 8m - 60$

prime

8. $64z^2 + 80z + 25$

$$(8z+5)(8z+5) \\ = (8z+5)^2$$

Learning Activity – Section 2.5 – Factor the Difference of Squares

Names: _____

Shirley

For each binomial, either factor out the GCF, or factor the difference of squares, if possible. If not possible, explain why not.

1. $a^2 - 49$

$$a^2 - 7^2$$

$$= (a - 7)(a + 7)$$

2. $25x^2 + 100$

$$25(x^2 + 4)$$

3. $c^2 + 144$

No gcd
sum of
two squares.

4. $81 - 64y^2$

$$9^2 - (8y)^2$$

$$= (9 - 8y)(9 + 8y)$$

5. $16n^2 - 1$

$$(4n)^2 - 1^2$$

$$(4n - 1)(4n + 1)$$

6. $x^2 + 121x$

$$x(x + 121)$$