Mathematics 11U

2.3c – Factoring Special Cases

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Differences of Squares

$$(2x-5)(2x+5)$$
= $4x^2 + 10x - 10x - 25$
- $4x^2 - 25$

$$9x^2 - 49$$
 $3x - 7)(3x + 7)$

1)
$$x^2 - 9$$

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

2)
$$4x^2 - 25$$

3)
$$7k^2 - 252$$

$$=7/k^2-36)$$

4)
$$640x^2 - 490$$

$$=10(8x-7)(8x+7)$$

Perfect Squares

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

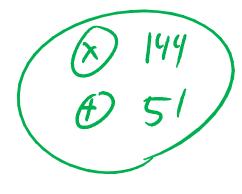
$$2(3x)(5) = 2(15x) = 30x$$

5)
$$\frac{16n^2 - 40n + 25}{9}$$

6)
$$\frac{49n^2 - 28n + 4}{2}$$

$$=(7_{n}-2)^{2}$$

7)
$$\frac{16r^2 + 51r + 9}{5}$$



8)
$$125x^2 + 200x + 80$$

$$=5(5x+4)^{2}$$