

## 11.5-11.8 Review

Factor each problem completely!

1)  $8p^3 + 7p^2 + 64p + 56$

$$\frac{(8p^3 + 7p^2)}{p^2} + \frac{(64p + 56)}{8}$$

$$p^2(8p + 7) + 8(8p + 7)$$

$$(p^2 + 8)(8p + 7)$$

2)  $x^2 - 36$

$$x^2 + 0x - 36$$

$$(x + 6)(x - 6)$$

$$\begin{array}{r} 6x \\ -6x \\ \hline 0x \end{array} \quad \checkmark$$

Factors of 36

1	36
2	18
3	12
4	9
6	6

3)  $2y^2 - y - 1$

$$(2y + 1)(y - 1)$$

$$\begin{array}{r} 1y \\ -2y \\ \hline -y \end{array} \quad \checkmark$$

Factors of 1

1	1
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4)  $\frac{20m^2 - 58m + 20}{2}$

$$2(10m^2 - 29m + 10)$$

$$2(5m - 2)(2m - 5)$$

$$\begin{array}{r} -4m \\ -25m \\ \hline -29m \end{array} \quad \checkmark$$

Factors of 10

1	10
2	5

5)  $a^2 - 6a + 9$

$$(a - 3)(a - 3)$$

$$\begin{array}{r} -3a \\ -3a \\ \hline -6a \end{array} \quad \checkmark$$

Factors of 9

1	9
3	3

6)  $n^2 - 3n - 18$

$$(n + 3)(n - 6)$$

$$\begin{array}{r} 3n \\ -6n \\ \hline -3n \end{array} \quad \checkmark$$

Factors of 18

1	18
2	9
3	6