Unit 5 Day 10 5-7 Factoring Trinomials Review

1)
$$\chi' + 10\chi + 16$$

= $(\chi + 2)(\chi + 8)$

2)
$$6x^{3}-12x^{2}-18$$

 $10+x^{2}+6x+c$
 $=6(x^{3}-2x^{2}-3)$

3)
$$-15\chi' + 20\chi^{3} - 35\chi$$

= $-5\chi(3\chi^{3} - 4)\chi' + 7$

$$\begin{array}{c} (1) \quad \chi^2 - 2\chi - 3 \\ = (\chi - 3)(\chi + 1) \end{array}$$

5)
$$\chi^3 - 2\chi^2 - 15\chi$$

= $\chi(\chi^2 - 2\chi - 15)$
= $\chi(\chi + 3)(\chi - 5)$

6)
$$-\chi^2 + 14\chi + 15$$

= $-(\chi^2 - 14\chi - 15)$
= $-(\chi - 15)(\chi + 1)$

7)
$$-\chi^{3} + 8\chi^{2} - 12\chi$$

= $-\chi(\chi^{2} - 8\chi + 12)$
= $-\chi(\chi - 6)(\chi - 2)$

8)
$$-2x^{3}-12x^{2}-18x$$

= $-2x(x^{2}+6x+9)$
= $-2x(x+3)(x+3)$
= $-2x(x+3)^{2}$

9)
$$3\chi^{2}y - 33\chi y + 30y$$

= $3y(\chi^{2} - 11\chi + 10)$
= $3y(\chi - 1)(\chi - 10)$

Practice 5-10