Algebra 1
Name_____ ID: 1

9.5a Kuta Factoring

Date_____ Period____

Factor. For each problem write the Factors of "C." Mentally CHECK by MULTIPLYING.

1) $x^2 + 10x + 21$

$(x + 7)(x + 3)$

2) $x^2 - 18x + 80$

$(x - 8)(x - 10)$

3) $x^2 - 12x + 20$

$(x - 10)(x - 2)$

4) $x^2 + 15x + 50$

$(x + 5)(x + 10)$

5) $x^2 - 6x - 40$

$(x - 10)(x + 4)$

6) $x^2 + 3x - 10$

$(x + 5)(x - 2)$

7) $x^2 - 2x - 15$

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

8) $x^2 - 9x + 18$

$(x - 6)(x - 3)$

9) $x^2 - 2x - 24$

$(x - 6)(x + 4)$

10) $x^2 + 7x - 8$

$(x + 8)(x - 1)$

Factor the common factor out of each expression.

11) $10n^3 - 25n^2 + 25n$

$5n(2n^2 - 5n + 5)$

12) $12n^7 + 6n^4 - 30n^3$

$6n^3(2n^4 + n - 5)$

13) $-n^3 - 4n^2 + 8n$

always factor out (-1) when the leading coef. is negative

$-n(n^2 + 4n - 8)$

14) $-10n^3 + 30n^2 - 5n$

$-5n(2n^2 - 6n + 1)$