

Final Exam Prep – Factoring Review

Factor Me!!

<p>1. $x^2 - 3x - 28$</p> <p>$(x - 7)(x + 4)$</p>	<p>-28 $7 \cdot 4$</p> <p>2. $-x^2 + 7x + 30$</p> <p>$-(x^2 - 7x - 30)$</p> <p>$-(x - 10)(x + 3)$</p> <p>30 $2 \cdot 15$ $3 \cdot 10$</p>
<p>3. $x^2 + 16x + 64$</p> <p>$(x + 8)^2$</p>	<p>64 $2 \cdot 32$ $4 \cdot 16$ $8 \cdot 8$</p> <p>4. $x^2 - 100$</p> <p>$(x + 10)(x - 10)$</p>

Use Factor by Grouping or the AC Method for the following	
5. $6x^2 + 7x + 2$ $6x^2 + 3x + 4x + 2$ $3x(2x + 1) + 2(2x + 1)$ $(3x + 2)(2x + 1)$	12 $3 \ 4$
6. $10x^2 + 17x + 3$ $10x^2 + 2x + 15x + 3$ $2x(5x + 1) + 3(5x + 1)$ $(2x + 3)(5x + 1)$	30 $2 \ 15$
7. $-2x^2 - 5x - 2$ $-(2x^2 + 5x + 2)$ $-(2x^2 + 4x + 1x + 2)$ $-(2x(x + 2) + 1(x + 2))$ $-(2x + 1)(x + 2)$	4 $1 \ 4$
8. $20z^2 - 27z - 8$ $20z^2 + 5z - 32z - 8$ $5z(4z + 1) - 8(4z + 1)$ $(5z - 8)(4z + 1)$	160 $2 \ 8$ $4 \ 40$ $5 \ 32$