

AA PREP—FACTORING VARIATIONS (BASICS)—WORKSHEET #2 **KEY**

Factor completely.

<p>1) $35x^4 - 70x^3$ GCF</p> <p>$35x^3(x-2)$</p>	<p>2) $75xy^7 - 50x^4y^2$ GCF</p> <p>$25xy^2(3y^5 - 2x^3)$</p>
<p>3) $x^2 - 144$ DIFF OF TWO SQUARES</p> <p>$(x)^2 (12)^2$</p> <p>$(x-12)(x+12)$</p>	<p>4) $49x^2 - 1$ DIFF OF TWO SQUARES</p> <p>$(7x)^2 (1)^2$</p> <p>$(7x-1)(7x+1)$</p>
<p>5) $81x^2 - 36$ GCF! DIFF OF TWO SQUARES</p> <p>$9(9x^2 - 4)$ 1st!</p> <p>$(3x)^2 (2)^2$</p> <p>$9(3x-2)(3x+2)$</p>	<p>6) $x^4 - 625$ DIFF OF TWO SQUARES</p> <p>$(x^2)^2 (25)^2$</p> <p>$(x^2-25)(x^2+25)$</p> <p>$(x-5)(x+5)(x^2+25)$</p>
<p>7) $x^2 - 5x - 150$ BASIC QUADRATIC TRINOMIAL</p> <p>-15×10 a.c</p> <p>-5×10 b</p> <p>$(x-15)(x+10)$</p> <p>$ax^2 + bx + c$ $a=1$</p>	<p>8) $-x^2 - x + 56$ GCF! BASIC QUADRATIC TRINOMIAL</p> <p>$-1(x^2 + x - 56)$ 1st!</p> <p>0×-7 a.c</p> <p>1×-7 b</p> <p>$-(x+0)(x-7)$</p> <p>$ax^2 + bx + c$ $a=1$</p>
<p>9) $x^2 - 8x + 16$ PERFECT SQUARE TRINOMIAL</p> <p>$(x)^2 (4)^2$</p> <p>$(x-4)^2$</p>	<p>10) $x^2 + 4x + 4$ PERFECT SQUARE TRINOMIAL</p> <p>$(x)^2 (2)^2$</p> <p>$(x+2)^2$</p>