Algebra 1 – Unit 5 – Assignment 5.5   Name _____ Date _____ Period ___

Part A: Polynomial Properties: Multiplying

<table>
<tr><td colspan="3">Simplify the expressions completely.</td></tr>
<tr><td>1.</td><td>A) $-5(3x^2 + 10x - 5)$</td><td>B) $-(3xy^2 + 6y - 6)$</td></tr>
<tr><td>2.</td><td>A) $(x + 7)(x + 9)$</td><td>B) $(4x - 6)(x + 14)$</td></tr>
<tr><td>3.</td><td>A) $(5a - 4b)(3x + 11)$</td><td>B) $(5x - 3y)(2x + 9y)$</td></tr>
<tr><td>4.</td><td>A) $(x + 3)(x^2 + 2x + 1)$</td><td>B) $-(4a + 11)(2x^2 + 3x - 4)$</td></tr>
</table>

Part B: Using Polynomials

<table>
<tr><td colspan="2">Answer the question completely.</td></tr>
<tr><td>5.</td><td>Henrietta has a fish tank that is a rectangular prism. The front face is twice as long as the tank is tall. The depth of the tank is just 12 inches. Draw the fish tank. Write expressions to describe the lengths of the sides. Given the volume is 1176 in^2, find the height.</td></tr>
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