# ALGEBRA ONE NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**COMPLETING THE SQUARE – PRACTICE A**

Decide whether each equation is an example of a *perfect square trinomial*. If it is a perfect square trinomial, write it as the square of a binomial. If it is not a perfect square trinomial, tell how you know.

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| 1. x2 + 5x + 10
 | 1. a2 – 14a + 49
 | 1. m2 + 10m - 100
 | 1. b2 – 8b + 16
 |

Find the value of b or c that will make the expression a perfect square. Rewrite the expression as the product of two binomials and multiply underneath to check your work.

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| --- | --- | --- | --- |
| 1. t2 – 24t + c
 | 1. x2 + bx + 25
 | 1. y2 + 40y + c
 | 1. a2 – bx + 81
 |

If the equation is not a perfect square trinomial, use the CTS process to make it one and then change it into vertex form. If it already is a perfect square trinomial, factor one side and change it into vertex form.

|  |  |
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| 1. x2 – 2x - 15 = 0
 | 1. w2 – 10w + 25 = 16
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| 1. b2 + 6b = -20
 | 1. r2 + 16r + 21 = 10
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