

Date: _____

Factoring Shortcuts (4.3, 4.5)

Handout Summary (Handouts are posted for you - please try them, try to summarize your findings, and then check your answers on the completed versions of the notes and handouts!)

- 1) What happens when $a = 1$?

- 2) How can you identify and factor a difference of squares?

- 3) Why can't we factor a sum of squares?

- 4) How can you identify and factor a perfect square trinomial?

More Practice:

1) Factor each of the following completely.

a) $x^2 - 4x - 21$

b) $12x^2 - 27$

c) $9x^2 + 6x + 1$

2) For parts a and c, state the zeros, equation of the axis of symmetry, and the coordinates of the vertex.

