

## Exercises:

Review of Distribution Property among other topics.

Evaluate by multiplying out the following expressions:

(Note: expressions don't have an equal sign.)

$$(x + 1)(x + 1)$$

$$(x + 1)^2$$

$$(x + 1)^3$$

$$(x^2 + 2x + 1)(x + 1)$$

$$(x + 1)^4$$

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Factor:

$$x^2 - 16$$

$$X^2 - 36$$

$$X^4 - 169$$

$$X^4 - 81$$

Factor:

$$x^2 + 6x + 9$$

$$25x^2 - 50$$

$$x^3 + 9x^2 + 27x + 27$$

$$\sqrt{2}x - 2\sqrt{2}$$

Factor:

$$(x^2 + 2x + 1) / (x + 1)$$

$$(25x^2 - 50) / 25$$

$$x^3 + 12x^2 + 48x + 64$$

$$(x^3 + 12x^2 + 48x + 64) / (x + 4)$$

Distribute Out and Collect Like Terms:

$$(x+1)(x+2)(x+3)$$

$$(x+1)^4$$