

Name _____

Simplifying Expressions

Find the continued product.

$$1) (x + 2)(x - 2)(x^2 + 4) = \underline{x^4 - 4x^2 + 16}$$

$$2) (x + 3)(x - 3)(x^2 + 9) = \underline{x^4 - 81}$$

$$3) (x + 4)(x - 4)(x^2 + 16) = \underline{x^4 - 256}$$

$$4) (x + 1)(x - 1)(x^2 + 2) = \underline{x^4 - 2x^2 + 1}$$

$$5) (x + 2)(x - 2)(x^2 + 3) = \underline{x^4 - 4x^2 + 6}$$

$$6) (x + 3)(x - 3)(x^2 + 4) = \underline{x^4 - 9x^2 + 12}$$

$$7) (x + 1)(x - 1)(x^2 - 1) = \underline{x^4 - 1}$$

$$8) (x + 2)(x - 2)(x^2 - 4) = \underline{x^4 - 16}$$

$$9) (x + 6)(x - 6)(x^2 + 36) = \underline{x^4 - 1296}$$

$$10) (x + 2)(x - 2)(x^2 - 1) = \underline{x^4 - 4}$$

$$11) (x + 3)(x - 3)(x^2 + 1) = \underline{x^4 - 9}$$

$$12) (x + 4)(x - 4)(x^2 + 2x + 4) = \underline{x^4 - 16x^2 + 16}$$

$$13) (x + 5)(x - 5)(x^2 + 2x - 5) = \underline{x^4 - 25x^2 + 25}$$

$$14) (x + 9)(x - 9)(x^2 + 4x + 16) = \underline{x^4 - 81x^2 + 1296}$$

$$15) (x + 1)(x - 1)(x^2 + x + 1) = \underline{x^4 - 4x^2 + 4}$$