

1. Use an area model to convert each polynomial from Standard Form to Factored Form:

a. $x^2 + 4x - 60$

b. $x^2 - 10x + 16$

c. $2x^2 + 7x - 15$

d. $4x^2 - 9$

e. $5x^2 - 15x$

f. $x^6 - 3x^3 - 18$

g. $x^4 - 81$

h. $(x^2 + 5x + 6)(x^2 - 3x - 4)$

i. $x^4 - 10x^2 + 9$

2. Use the Zero Product Property to solve each equation below:

** For problems e, f, g, h, i and j below, use your answer on the previous page to help solve.

a. $(x - 1)(x + 5) = 0$

b. $(2x + 5)(x - 6) = 0$

c. $x(5x + 8) = 0$

d. $(x + 4)(x - 3)(x + 11) = 0$

e. $4x^2 - 9 = 0$

f. $5x^2 - 15x = 0$

g. $x^4 - 81 = 0$

h. $(x^2 + 5x + 6)(x^2 - 3x - 4) = 0$

i. $x^4 - 10x^2 + 9 = 0$