

Higher Algebra
7.2 Zero Product Property

Name _____
Hour _____

1. State the Zero-Product Property, then explain what the property tells us in your own words.

2. Evaluate:

a. $(3)(4)(0)=$

b. $(5)(x)(0)(7)=$

3. Solve for x:

a. $(5)(3)(x)(7) = 0$

b. $(x + 9)(x + 8) = 0$

c. $(x - 3)(x - 5) = 0$

d. $2(x - 5)(x + 3) = 0$

e. $(2x - 1)(2x + 3) = 0$

f. $5(3x - 1)(2x + 5) = 0$

g. $(x - 7)(2x + 9)(x - 3) = 0$

h. $x(x + 2)(3x + 5) = 0$

4. How is the Zero-Product Property connected to the graph of a quadratic function (you'll have to wait until Wednesday to answer this question☺)?

5. Find each product. (**Hint: Rectangle Diagrams work great for these☺)

a. $6x(3x + 7)$

b. $(x - 2)(x + 9)$

c. $(2x + 5)(2x - 5)$

d. $(x + 2)^2$