A-REI Zero Product Property 3

Task

The Zero Product Property (ZPP) states that if the product of two numbers is zero, then at least one of the numbers is zero. In symbols, if $ab = 0$, then $a = 0$ or $b = 0$. We can use this property when we solve equations where a product is 0. For each equation below, use the ZPP to find all solutions. Explain each step in your reasoning.

a. $x(13 - 4x) = 0$,

b. $7(y + 12) = 0$,

c. $(x - 19)(x + 3) = 0$,

d. $(y - 6)(3z - 4) = 0$.