## Sometimes, Always, Never

By plugging in values for x, determine if the following statements are sometimes true, always true, or never true. Show all the examples you try.

A. 
$$\sqrt{x+2} = \sqrt{x} + \sqrt{2}$$

B. 
$$\sqrt{3x} = \sqrt{3} \cdot \sqrt{x}$$

$$C. \ \sqrt{2-x} = \sqrt{2} - \sqrt{x}$$

D. 
$$\sqrt{x^2 - 2^2} = \sqrt{x} - \sqrt{2}$$
  
E.  $\sqrt{x^2} \cdot \sqrt{3^2} = 3x$ 

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F. 
$$\frac{\sqrt{x^2}}{\sqrt{3^2}} = \frac{x}{3}$$

G. 
$$(3 + \sqrt{x})(3 - \sqrt{x}) = 10$$
  
H.  $\sqrt{x+1} + \sqrt{x-1} = \sqrt{2x}$ 

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