

$$\log(22-x) = -1 + \log x$$

$$\log(22-x) - \log x = -1$$

$$\log \frac{22-x}{x} = -1$$

$$10^{-1} = \frac{22-x}{x}$$

$$\frac{1}{10} = \frac{22-x}{x}$$

$$x = 220 - 10x$$

$$11x = 220$$

$$x = \frac{220}{11}$$

$$x = 20$$