

$$5) \ln x^2 = \ln(x+20)$$

$$e^{\ln x^2} = e^{\ln(x+20)}$$

$$x^2 = x+20$$

$$-x - 20$$

$$\underline{-x-20}$$

$$x^2 - x - 20 = 0$$

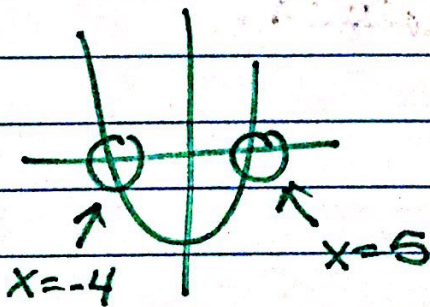
$$(x-5)(x+4) = 0$$

$$x-5=0 \quad x+4=0$$

$$x=5$$

$$x=-4$$

* Check for extraneous



$$\log_7 x^2 = \log_7 (x+20)$$

$$x^2 = x+20$$

$$1 \cdot -20 = -20$$

$$\begin{array}{c} \wedge \\ -5x + 4x = -1x \end{array}$$