

1.52  
1

$$x^2 - 2|m|x + m^2 - 1 = 0$$

$$0 < \Delta = 4m^2 - 4m^2 + 4 = 4 \rightarrow |m| > 0$$

$$0 \leq f(4) = 16 - 8|m| + m^2 - 1 = m^2 - 8|m| + 15$$

$$t \leq 3 \quad \vee \quad t \geq 5$$

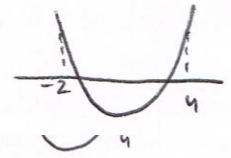
$$|m| \leq 3 \quad \vee \quad |m| \geq 5$$

$$-3 \leq m \leq 3 \quad \vee \quad m \leq -5 \quad \vee \quad m \geq 5$$

$$0 < f(-2) = 4 + 4|m| + m^2 - 1 = m^2 + 4|m| + 3$$

$$-2 < \frac{-b}{2a} < 4 \rightarrow -2 < \frac{2|m|}{2} < 4$$

$$-2 < |m| < 4 \rightarrow -4 < m < 4$$

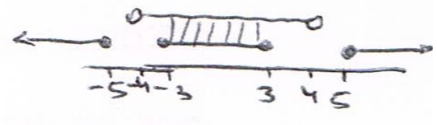


$|m| = t, \quad t > 0$



$|m| \leq -3 \quad \vee \quad |m| \geq -1$   
 $|m| \geq 1$

מימין ושמאל



$$-3 < m < 3$$