

1.81
1.1 (1) $x^2 + (m-3)x + m^2 = 0$

$\frac{c}{a} > 0, -\frac{b}{a} > 0, \Delta \geq 0$ (1.73)

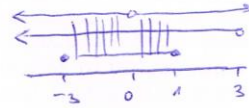
$0 < \Delta = (m-3)^2 - 4m^2 = -3m^2 - 6m + 9$



$-3 \leq m \leq 1$

$0 < -\frac{b}{a} = -m+3 \rightarrow m < 3$

$0 < \frac{c}{a} = m^2 \rightarrow m \neq 0$



$-3 \leq m < 0 \quad \vee \quad 0 < m \leq 1$

(2)

(1.71) $17 \leq x_1^2 + x_2^2$ (1.73)

$17 \leq x_1^2 + x_2^2 = (x_1 + x_2)^2 - 2x_1x_2 = (m-3)^2 - 2m^2$

$m^2 + 6m + 8 \leq 0$



$-4 \leq m \leq -2$

(1.71) $17 \leq x_1^2 + x_2^2$ (1.73) (1.71) $17 \leq x_1^2 + x_2^2$ (1.73)

$-3 \leq m \leq -2$

