

4112  
1c1

$$x^2 + x(2-8m) + 15m^2 - 2m - 7 = 0$$

$$0 < \Delta = 4 - 64m + 64m^2 - 60m^2 + 8m + 28 = 4m^2 - 56m + 32$$

$$0 < m^2 - 14m + 8$$



$$\boxed{m > 7 + \sqrt{41}} \\ m < 7 - \sqrt{41}}$$



$$0 < f(3) = 9 - 24m + 6 + 15m^2 - 2m - 7 = 15m^2 - 26m + 8$$



$$\boxed{m > \frac{4}{3}} \\ m < \frac{2}{5}}$$

$$\frac{-b}{2a} < 3 \rightarrow 3 > \frac{8m-2}{2} = 4m-1 \rightarrow \boxed{m < 1}$$

$$m > \frac{2}{5} \quad \text{אין טעם להוסיף}$$