

0.32
2

(K)

$$5(x^2 - 3x + 2) + 5(x^2 + 3x + 2) = \cancel{8x^2 + 20} \quad 8(x^2 - 1)(x^2 - 4)$$

$$10x^2 + 20 = 8x^4 - 40x^2 + 32$$

$$8x^4 - 50x^2 + 12 = 0$$

$$4x^4 - 25x^2 + 6 = 0$$

$$x^2 = 6 \rightarrow x = \pm\sqrt{6}$$

$$x^2 = \frac{1}{4} \rightarrow x = \pm\frac{1}{2}$$

(P)

$$|x - m^2| = -m^2 + 2m + 3$$

$\sqrt{\frac{1}{3}}$

$$\frac{-2 \pm 4}{-2} = \begin{cases} 3 \\ -1 \end{cases}$$

$$\leftarrow -m^2 + 2m + 3 \geq 0 \quad \text{Q173f}$$

$$-1 < m < 3$$

WZBZTKZmZ3

$$x - m^2 = -m^2 + 2m + 3$$

$$x = 2m + 3$$

$$-x + m^2 = -m^2 + 2m + 3$$

$$x = 2m^2 - 2m - 3$$

נרצף "סוג"

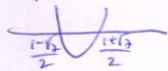
פונקציה קבועה

$$2m + 3 > 0 \quad \text{P1}$$

$$m > -1\frac{1}{2}$$

$$2m^2 - 2m - 3 > 0$$

$$\frac{2 \pm \sqrt{28}}{4} = \frac{1 \pm \sqrt{7}}{2}$$



$$m > -1\frac{1}{2} \quad \text{P1} \quad m < \frac{1-\sqrt{7}}{2} \quad \text{או} \quad m > \frac{1+\sqrt{7}}{2}$$

$$-1\frac{1}{2} < m < \frac{1-\sqrt{7}}{2} \quad \text{או} \quad m > \frac{1+\sqrt{7}}{2}$$

פונקציה קבועה

$$2m + 3 < 0 \quad \text{P1}$$

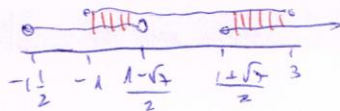
$$m < -1\frac{1}{2}$$

$$2m^2 - 2m - 3 < 0$$

$$\frac{1-\sqrt{7}}{2} < m < \frac{1+\sqrt{7}}{2}$$

q

אינטרוס 5 של m



$$-1 < m < \frac{1+\sqrt{7}}{2} \quad \text{או}$$

$$\frac{1-\sqrt{7}}{2} < m < 3$$

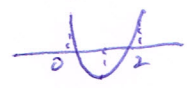
0.32
3

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

פתרון: $|x| = t$ (כאן)

$$(m+2)t^2 + (m-3)t + 2m+1 = 0$$

התנאי (התנאי הראשון) $0 < t < 2$ (כאן) או $-2 < x < 0$ (כאן)



- 1 $\Delta > 0$
- 2 $f(0) > 0$
- 3 $f(2) > 0$
- 4 $0 < -\frac{b}{2a} < 2$

$$\phi \leftarrow -5|x| = 3$$

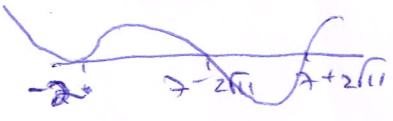
$m = -2$: (כאן) פתרון

פתרון

$$t^2 + \frac{m-3}{m+2}t + \frac{2m+1}{m+2} = 0$$

1

$$0 < \Delta = \left(\frac{m-3}{m+2}\right)^2 - 4 \cdot \frac{2m+1}{m+2} = \frac{m^2 - 6m + 9 - 8m - 4}{(m+2)^2} = \frac{m^2 - 14m + 5}{(m+2)^2}$$



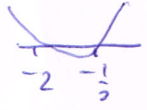
$$7 \pm 2\sqrt{11} = \frac{14 \pm \sqrt{176}}{2}$$

(כאן) פתרון

2

$m < -2$ (כאן) $-2 < m < 7-2\sqrt{11}$ (כאן) $m > 7+2\sqrt{11}$ (כאן)

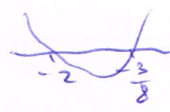
$$0 < f(0) = \frac{2m+1}{m+2}$$



(כאן) $m > -\frac{1}{2}$
 $m < -2$

3

$$0 < f(2) = 4 + 2 \cdot \frac{m-3}{m+2} + \frac{2m+1}{m+2} = \frac{8m+3}{m+2}$$



(כאן) $m > -\frac{3}{8}$
 $m < -2$

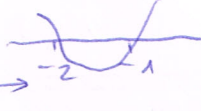
4

$$0 < -\frac{b}{2a} < 2 \rightarrow 0 < -\frac{m-3}{2(m+2)} < 2$$

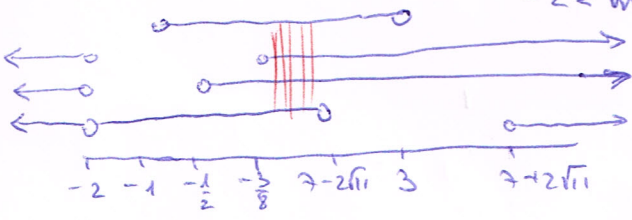
או $0 < \frac{3-m}{2(m+2)}$ או $0 < \frac{5m+5}{2(m+2)}$



$-2 < m < 3$



(כאן) $m > -1$
 $m < -2$



$-1 < m < 3$

(כאן) פתרון

$$-\frac{3}{8} < m < 7-2\sqrt{11}$$

(כאן) פתרון