

17 ע"מ / דא"ר

$$1900 \left\{ \begin{array}{c|c|c|c} \text{מחיר} & \text{כמות} & \text{מחיר} & \text{כמות} \\ \hline ax & x & a & 2 \leq 10 \\ \hline (50-x)(2a-10) & 50-x & 2a-10 & 2 \leq 10 \end{array} \right.$$

$$ax + (50-x)(2a-10) = 1900$$

$$ax + 100a - 500 - 2ax + 10x = 1900$$

$$x(a - 2a + 10) = 1900 - 100a + 500$$

$$x = \frac{2400 - 100a}{10 - a} \quad \left( \begin{array}{l} \text{מחיר} \\ \text{כמות} \end{array} \right)$$

$$50 - x = 50 - \frac{2400 - 100a}{10 - a} = \frac{50a - 1900}{10 - a} \quad \left( \begin{array}{l} \text{מחיר} \\ \text{כמות} \end{array} \right)$$

2)  $0 < x < 50$

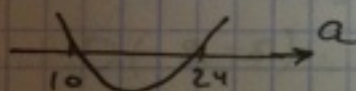
$$0 < \frac{2400 - 100a}{10 - a} < 50$$

$$\frac{2400 - 100a}{10 - a} > 0 \quad \left| \cdot (10 - a)^2 \right. \quad \frac{2400 - 100a}{10 - a} < 50$$

$$(2400 - 100a)(10 - a) > 0$$

$$a = 24$$

$$a = 10$$



$$a < 10 \text{ or } a > 24$$

$$\frac{2400 - 100a}{10 - a} < 50$$

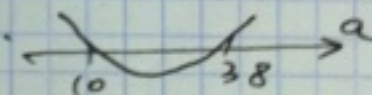
$$\frac{2400 - 100a}{10 - a} - 50 < 0$$

$$\frac{1900 - 50a}{10 - a} < 0 \quad \left| \cdot (10 - a)^2 \right.$$

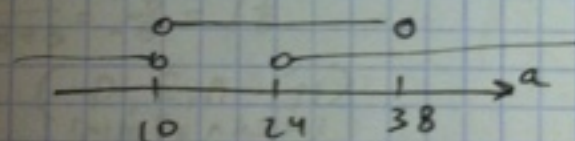
$$(1900 - 50a)(10 - a) < 0$$

$$a = 38$$

$$a = 10$$



$$10 < a < 38$$



$$\boxed{24 < a < 38}$$

3)  $\frac{2400 - 100a}{10 - a} = \frac{50a - 1900}{10 - a} \cdot 1.5 \quad \left| \cdot (10 - a) \right.$

$$2400 - 100a = 1.5(50a - 1900)$$

$$\boxed{a = 30}$$