

1.8

$$\log_a(x^2-4) + \log_a(x+1) \leq \log_a(x-2) + \log_a(2x^2-2x+8)$$

$$\log_a((x-2)(x+2)(x+1)) \leq \log_a[2(x-2)(x^2-x+4)]$$

$\boxed{a > 1}$

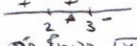
$$(x-2)(x+2)(x+1) \leq (x-2)2(x^2-x+4)$$

$$(x-2)[x^2+3x+2-2x^2+2x-8] \leq 0$$

$$-x^2+5x-6=0$$

$$x=2$$

$$x=3 \quad x=2$$



$\boxed{x \geq 3}$   $\sqrt{a} > 1$   $\boxed{x \geq 3}$

$0 < a < 1$

$$(x-2)(x+2)(x+1) \geq 2(x-2)(x^2-x+4)$$

$$(x-2)[x^2+3x+2-2x^2+2x-8] \geq 0$$

$$-x^2+5x-6=0$$

$$x=3$$

$\boxed{x \leq 3}$   
 $\sqrt{a} < 1$   $\boxed{2 < x \leq 3}$

הצבה במוצא  
 $x < -2$   $x > 2$   $x^2-4 > 0$   
 $x > -1$   $x+1 > 0$   
 $x > 2$   $x-2 > 0$   
 $\boxed{x > 2}$   $2x^2-2x+8 > 0$