

$$\text{1.95} \quad \textcircled{14} \quad f(x) = |x-1| - 2|x-2| + 3|x-3|$$

$$x \leq 1 \quad f(x) = -(x-1) + 2(x-2) - 3(x-3)$$

$$= -2x + 6$$

$$(0, 6) \quad (1, 4) \quad \text{↗↗↗↗}$$

$$1 \leq x \leq 2 \quad f(x) = x-1 + 2(x-2) - 3(x-3)$$

$$f(x) = 4$$

$$2 \leq x \leq 3 \quad f(x) = x-1 - 2(x-2) - 3(x-3)$$

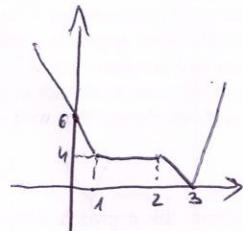
$$= -4x + 12$$

$$(2, 4) \quad (3, 0) \quad \text{↗↗↗↗}$$

$$x \geq 3 \quad f(x) = x-1 - 2(x-2) + 3(x-3)$$

$$= 2x - 6$$

$$(3, 0) \quad (4, 2) \quad \text{↗↗↗↗}$$



$$\textcircled{15} \quad f(x) = 4-m$$

$$\text{I} \quad 0 \leq f(x) \quad \text{↗↗↗↗} \quad m=4 \quad \text{↗↗}$$

$$\text{II} \quad f(x) = 4 \quad \text{↗↗↗↗} \quad m=0 \leftarrow 4-m=4 \quad \text{↗↗}$$

$$\text{III} \quad f(x) < 0 \quad \text{↗↗↗↗} \quad m > 4 \leftarrow 4-m < 0 \quad \text{↗↗}$$