Absolute Value Practice Test

(A) Solve

① $|-8-9x| = 10$

② $|4x+1| = 19$

③ $|-3x-9| = 36$

(B) Solve (use critical points / number line / test point method)

① $|4+2x| \geq 20$

② $|3+10x| < 27$

© Sketch $f(x) = -2|3x-4| + 2$, and perform a complete study

D On a given day, the market value, $V(t)$, of *Bio Tech* stock shares fluctuated in relation to the time elapsed in hours, t, from the opening of the day's trading session, according to an absolute value function.

At the opening of trading, *Bio Tech* stock was worth $6. Three hours later, it reached its maximum value of $9.

How many hours had elapsed from the time the share first reached $8 until it decreased to $5?

Ⓔ $f(x) = X + 5$

$g(x) = 2|X + 1| - 4$

$f(g(x)) =$

$g(f(x)) =$

(F) Find the rules, given

(a) $(h, k) = (2, 1)$ point = $(4, 7)$

(b) point $(2, 3)$ and $(3, 5)$ and $(7, 5)$

(c) point $(3, -12)$, $(13, 6)$, $(17, -6)$