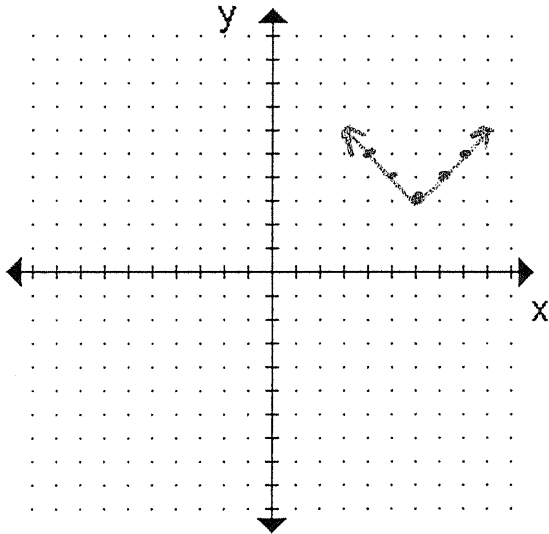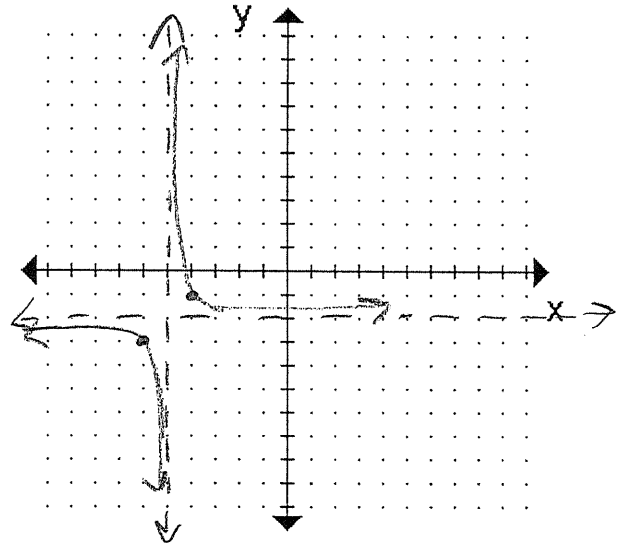**FST 3.1-3.3 Quiz Review**

1) Graph without a calculator

a) $y = |x - 6| + 3$

→ right 6

↳ up 3

b) $y = \dfrac{1}{x+5} - 2$

→ down 2

↳ left 5

2) Write the Parent functions for the above graphs.

a) $y = |x|$

b) $y = \dfrac{1}{x}$

3) Write the Translation rule for the above graphs.

a) $T(x, y) \rightarrow (x + 6, y + 3)$

b) $T(x, y) \rightarrow (x - 5, y - 2)$

4) Find the asymptotes for the above graphs.

a) none

b) $x = -5$

$y = -2$

5) In an equation for a function or relation, how is the graph of the image related to the graph of the preimage if:

a) x is replaced by x − 3?

Shifted right 3

b) x is replaced by x + 4?

Shifted left 4