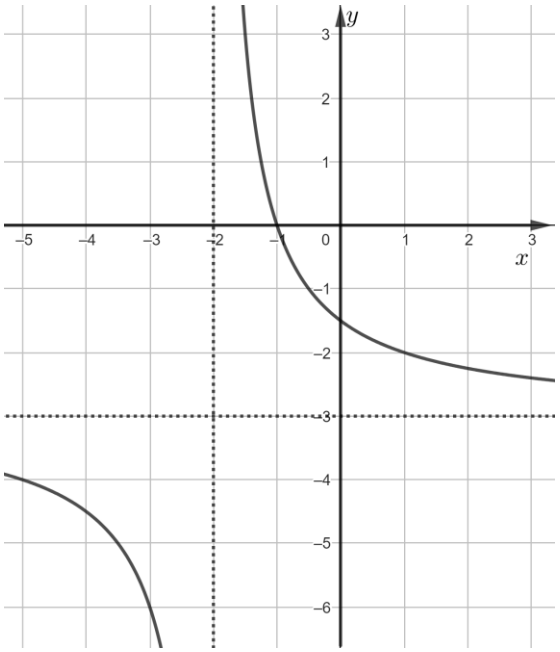
Translating a hyperbola $y = \frac{a}{x}$ | Answers

The graph of the function f is a translation of the hyperbola given by the formula $y = \frac{3}{x}$ by a vector $\vec{v} = [p, q]$.



(1) $p = -2, \quad q = -3$

(2) $f(x) = \frac{3}{x+2} - 3$

(3) $D_f = (-\infty, -2) \cup (-2, \infty)$

(4) $R_f = (-\infty, -3) \cup (-3, \infty)$

(5) $f(x) \leq 0$ dla $x \in (-\infty, -2) \cup [-1, \infty)$

(6) $y = -3$

(7) $x = -2$

(8) T F F T T