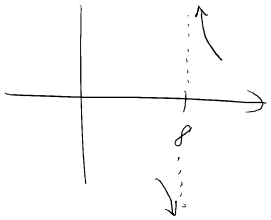
- Graph $f(x) = \dfrac{x^2 - 8x + 15}{x^2 - 11x + 24} = \dfrac{(x-3)(x-5)}{(x-3)(x-8)}$

Hole @ $x=3$ $\quad r(x) = \dfrac{x-5}{x-8}$ $\quad r(3) = \dfrac{3-5}{3-8} = \dfrac{-2}{-5}$ $\quad$ hole at $\left(3, \frac{2}{5}\right)$

Zero @ $x=5$

V.A @ $x=8$ $\quad f(8.1)$ is $\dfrac{(+)(+)}{(+)(+)}$

$f(7.9)$ is $\dfrac{(+)(+)}{(+)(-)}$



y-int $= \dfrac{15}{24} = \dfrac{5}{8}$

H.A $\quad y = 1$ $\quad \dfrac{x^2 - 8x + 15}{x^2 - 11x + 24} = 1$

$x^2 - 8x + 15 = x^2 - 11x + 24$

$-8x + 15 = -11x + 24$

$3x = 9$

$x = 3$ ← But 3 not in domain.