

Do Now: #1 from the Practice section of the Solving Rational Equations Graphically packet

Practice Exercises:

Solve each of the following graphically. Be sure to sketch a graph indicating any asymptotes and intercepts.

1. $\frac{4}{x} + \frac{1}{3x} = 9$

$$\frac{4}{x} + \frac{1}{3x} - 9 = 0$$

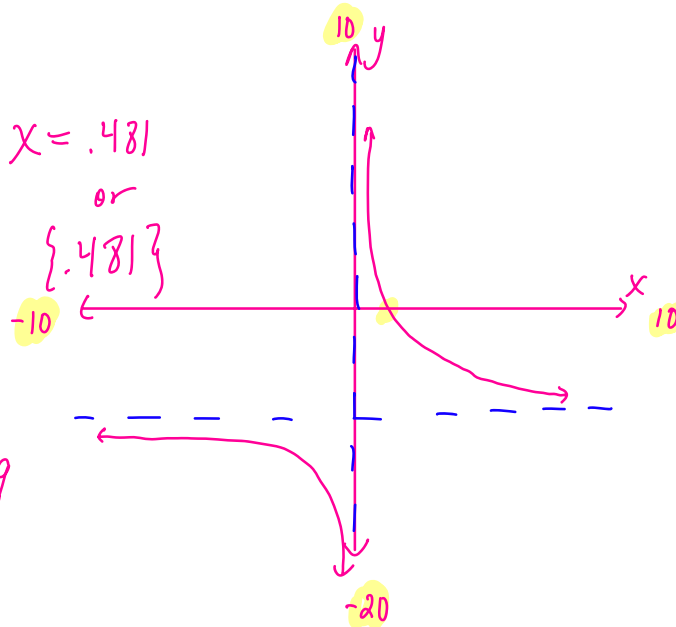
PVA: $x = 0$

EB: $y = 0 + 0 - 9 = -9$

$x = .481$

or

$\{.481\}$



Continuing in that packet...

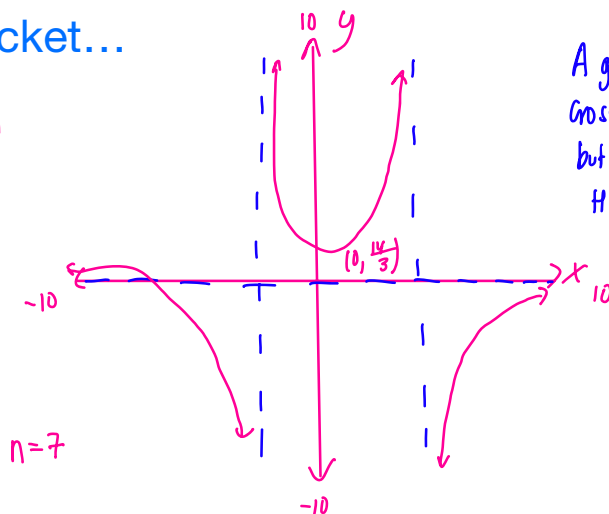
2. $\frac{3}{n+1} = \frac{5}{n-3}$

let $x = n$

$$\frac{3}{x+1} - \frac{5}{x-3} = 0$$

PVA: $x = -1, 3$

EB: $y = 0 - 0 = 0$



A graph can never cross over it's VA but it can cross its HA or OA.

$n = 7$