

Name: _____

“Building” Rational Functions

Directions:

- Log in to NavNet and go to the Activity Center.
- For each example, create a rational function that meets all of the given criteria (horizontal, vertical, and oblique asymptotes and holes).
- Submit your equation in either factored or expanded form.
- Draw a thumbnail sketch for each function.

Examples:

Ex.	Criteria	Equation	Sketch
1	HA: $y=0$ VA: $x=0$		
2	HA: $y=0$ VA: $x=5$		
3	HA: $y=0$ VA: $x=2, x=-4$		
4	HA: $y=3$ VA: $x=0$		
5	HA: $y=2$ VA: $x=1$		
6	HA: $y=1$ VA: $x=4, x=-3$		
7	HA: $y=-2$ VA: $x=6$ Hole: When $x=3$		
8	HA: $y=2$ VA: $x=1$ Hole: $(-1,3)$		
9	VA: $x=3$ OA: $y=2x-3$		
10	VA: $x=-4$ OA: $y=-x+2$ Hole: $(0,3)$		