

Precalculus
WS 1: Graphs of Rational Functions
Fall 2018

Name _____

Date _____ Per _____

For each of the following, state the vertical, horizontal, and slant asymptotes, and the x and y intercepts, then sketch and attach its graph.

1. $y = \frac{3}{x-2}$

2. $y = \frac{2}{x^2 + 2x - 8}$

3. $y = \frac{4x-5}{x+2}$

4. $y = \frac{1-x}{2-x}$

5. $y = \frac{2x^2 - 2}{x^2 - 4}$

6. $y = \frac{x^2 + x - 6}{x^2 + 3x - 4}$

7. $y = \frac{(x+2)^2}{(x-1)(x-3)}$

8. $y = \frac{x^2 - 3x - 4}{x+3}$

9. $y = \frac{x^2 - 4x}{x+1}$

10. $y = \frac{2x^2 - 18}{x-3}$

1. VA _____ HA _____

SA _____

x-int _____ y-int _____

2. VA _____ HA _____

SA _____

x-int _____ y-int _____

3. VA _____ HA _____

SA _____

x-int _____ y-int _____

4. VA _____ HA _____

SA _____

x-int _____ y-int _____

5. VA _____ HA _____

SA _____

x-int _____ y-int _____

6. VA _____ HA _____

SA _____

x-int _____ y-int _____

7. VA _____ HA _____

SA _____

x-int _____ y-int _____

8. VA _____ HA _____

SA _____

x-int _____ y-int _____

9. VA _____ HA _____

SA _____

x-int _____ y-int _____

10. VA _____ HA _____

SA _____

x-int _____ y-int _____