

Name: _____

Date: _____

H.W.5.Find the Domain Algebraically**FINDING DOMAIN ALGEBRAICALLY****CASE 1: FRACTIONS**Directions: State the domain in interval notation.

1.) $y = \frac{1}{x}$

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

3.) $f(x) = \frac{8}{3x+9}$

4.) $f(x) = \frac{x^3}{x^2-4x-96}$

5.) $y = \frac{6x}{x^2+7x+12}$

6.) $y = \frac{3x^2-8x}{2x^2-5x-3}$

CASE 2: RADICALSDirections: State the domain in interval notation.

7.) $y = \sqrt{x-3}$

8.) $y = \sqrt{2x+8}$

9.) $y = \sqrt{x^2-9}$

10.) $y = \sqrt[3]{1-x^2}$

11.) $f(x) = \sqrt{4-x^2}$

12.) $f(x) = \sqrt{x^2+x-12}$