7.1 Rational Functions DAY TWO CYU

☑ Use when you get it right all by yourself

 $oldsymbol{\mathcal{S}}$ Use when you did it all by yourself, but made a silly mistake

HUse when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

 \emph{X} Use when a question was attempted but wrong (get help)

NUse when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Domain in interval notation.	1, 2	3, 4	5, 6
Simplifying Rational Expressions	7 - 9	10 - 12	13 - 17

Find the domain of each rational expression in interval notation.

$$1. f(x) = \frac{4 - 3x}{2}$$

$$2. g(x) = -\frac{5x+x^2}{3x}$$

3.
$$h(x) = \frac{-4x}{-2+x}$$

$$4. R(x) = \frac{-2}{2x+5}$$

$$5. C(x) = \frac{3+2x}{2x^2-14x+20}$$

6.
$$h(x) = \frac{x+3}{x^2-4}$$

Simplify each expression. Restrict the domain in interval notation too.

7.
$$\frac{x-7}{7-x}$$

8.
$$\frac{y+9}{9+y}$$

9.
$$\frac{3}{9x+6}$$

$$10.\,\frac{-5a-5b}{a+b}$$

11.
$$\frac{x+5}{x^2-4x-45}$$

$$12.\,\frac{12x^2+4x-1}{2x+1}$$

$$13.\,\frac{x^3+7x^2}{x^2+5x-14}$$

$$14.\,\frac{x^4-10x^3}{x^2-17x+70}$$

$$15.\frac{ab+ac+b^2+bc}{b+c}$$

$$16.\,\frac{24y^2-8y^3}{15y-5y^2}$$

17.
$$\frac{4-x^2}{x-2}$$

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

