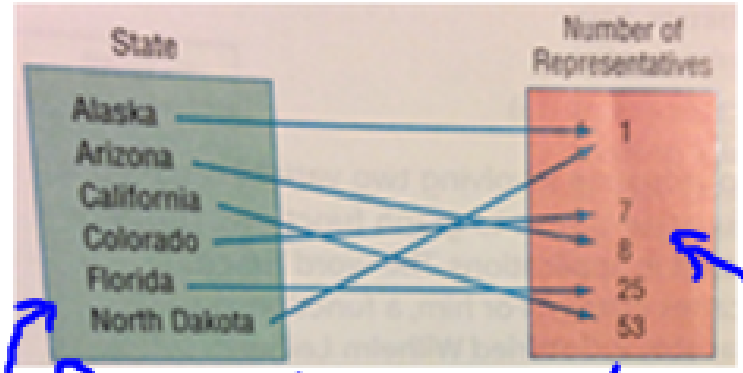
Quiz Today

Take out your review packets

Name: 2.1-2.2 Review Sheet Period:

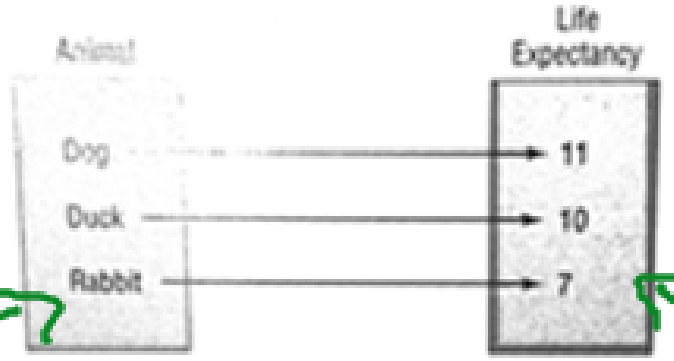
Determine whether the relations below represents a function. If it is a function, sate the domain and range.



Function: Yes

Domain:

Range:



Function: yes

Domain:

Range:

Determine whether the equation defines y as a function of x.

$X^2 - 5y^2 = 1$ .... Answer = Not a function

Find f(-3) when $f(x) = 2x^2 - 5x + 4$

$2(-3)^2 - 5(-3) + 4$

$2(9) + 15 + 4$

$18 + 19$

$f(-3) = 37$

The function C defined by:

$$C(x) = 0.56x^2 - 34.39x + 1212.57 + \frac{20{,}000}{x}$$

gives the cost of manufacturing computers, x, in a day. Find the cost equivalent to 30 computers.

$$C(30) = .56(30)^2 - 34.39(30) + 1212.57 + \frac{20{,}000}{30}$$

$$= .56(900) - 1031.70 + 1212.57 + \frac{2000}{3}$$

$$= 507 + 180.87 + \frac{2000}{3}$$

$$C(30) = 1354.53\overline{6}$$

$$= \$1354.54$$

For the functions $f(x) = 2x^2 + 3$ $g(x) = 4x^3 + 1$

Find the following... then find the domain for each.

(a) $(f + g)(x)$

$2x^2 + 3 + 4x^3 + 1$

$4x^3 + 2x^2 + 4$

For the functions $f(x) = 2x^2 + 3$ $g(x) = 4x^3 + 1$

Find the following... then find the domain for each.

(b) (f - g)(x)

$$2x^2 + 3 - (4x^3 + 1)$$

$$2x^2 + 3 - 4x^3 - 1$$

$$-4x^3 + 2x^2 + 2$$

For the functions $f(x) = 2x^2 + 3$ $g(x) = 4x^3 + 1$

Find the following... then find the domain for each.

(c) $(f \cdot g)(x) = (2x^2 + 3)(4x^3 + 1)$

$8x^5 + 2x^2 + 12x^3 + 3$

$$8x^5 + 12x^3 + 2x^2 + 3$$

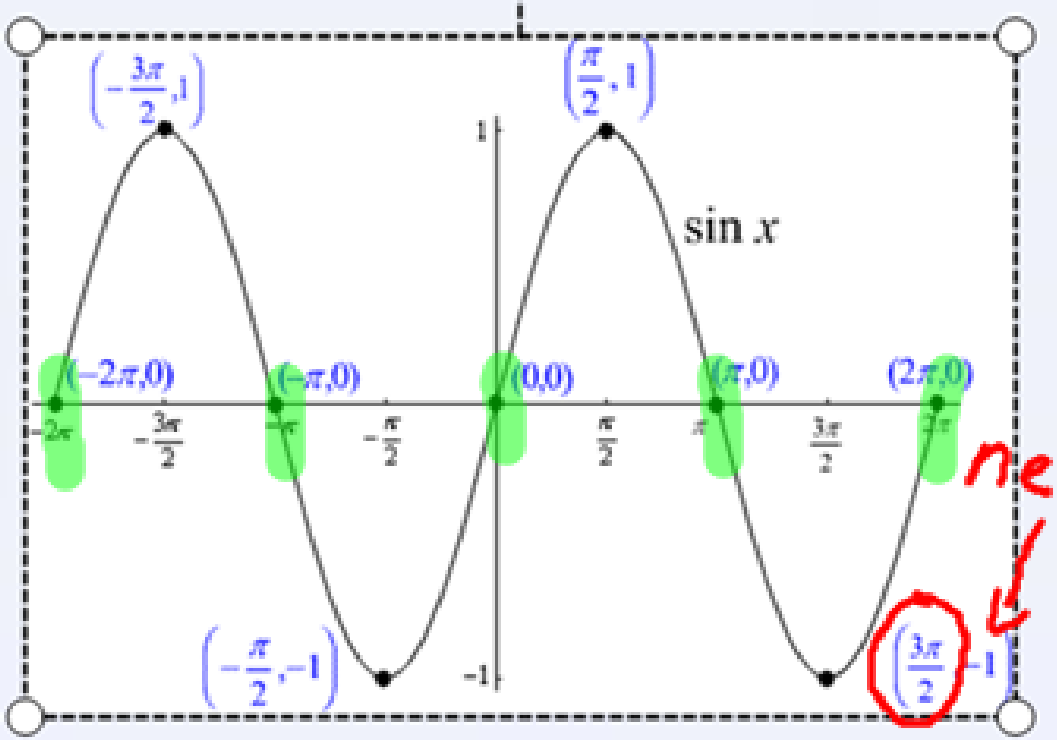
For the functions $f(x) = 2x^2 + 3$ $g(x) = 4x^3 + 1$

Find the following... then find the domain for each.

(d) $\left(\frac{f}{g}\right)(x)$

$$\frac{2x^2+3}{4x^3+1}$$

(a) Is $f(\frac{3\pi}{2})$ positive or negative?



In the Graph above...

What are the x-intercepts?

$-2\pi, -\pi, 0, \pi, 2\pi$

Quiz Time
Sections 2.1-2.2

You have until
10:55