Unit 9 Module A Notes Sections 23.1 – 23.2

View the PowerPoint, Videos, or Textbook for Module 9A.
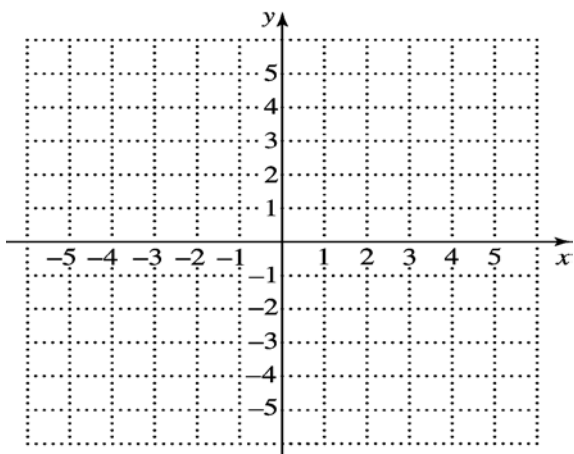
<u>Vocabulary</u> *Fill in the blanks.*

1. (Section 23.1) A _____ is a rule that assigns to each member of some set (x values) exactly one member of another set (y values).

2. (Section 23.1) A _____ is a rule that assigns to each member of some set at least one member of another set.

3. (Section 23.2) If $f(3) = 7$, the corresponding ordered pair is _____

4. (Section 23.2) The _____ is the set of all first (x) coordinates.

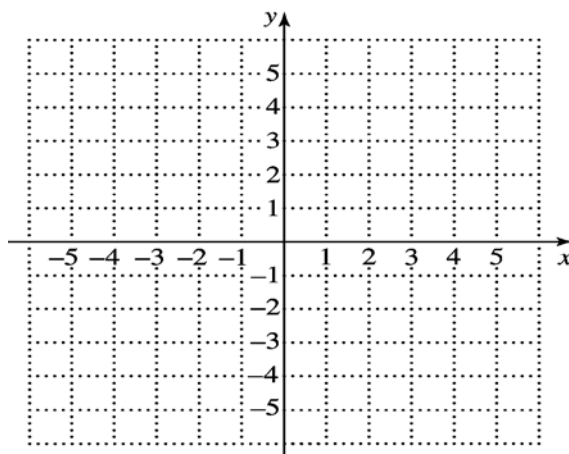5. (Section 23.2) The _____ is the set of all second (y) coordinates.

<u>Problems</u> *Show ALL steps.*

1. (Section 23.1) Graph the following

$y = f(x) = 3$

$-3x = 6$

2. (Section 23.1) Find the function values. $f(x) = |3 + x|$; $f(-4)$ and $f(4)$

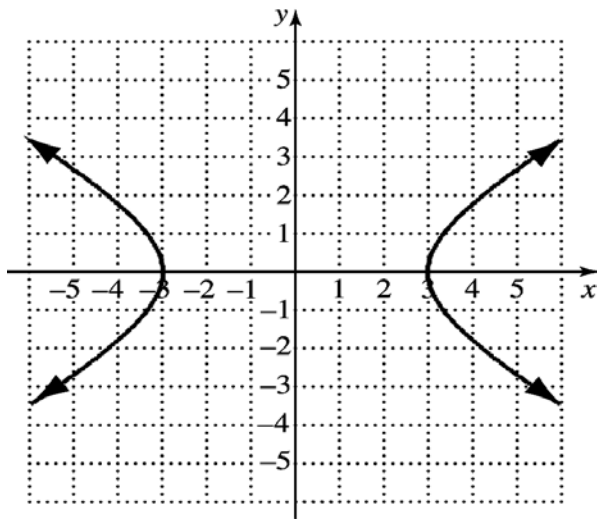$f(-4) =$ _____ $f(4) =$ _____

3. (Section 23.1) The function $w(t) = 170 - 2t$ can be used to estimate Janelle's weight, in pounds, t weeks after the start of a diet. a) Find Janelle's weight 12 weeks after the start of the diet. b) After how many weeks will Janelle weigh 156 lbs.?
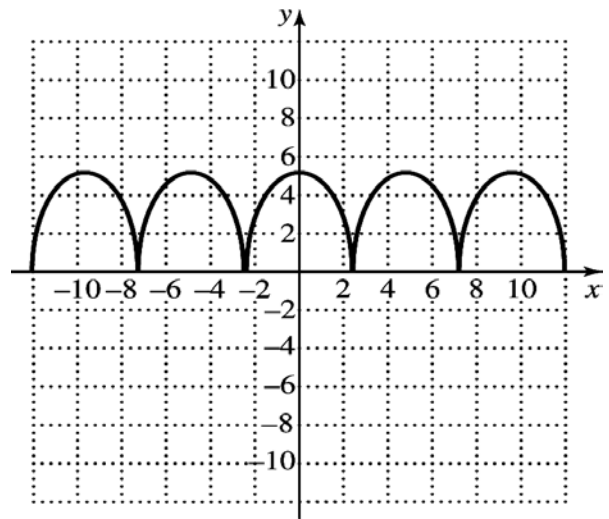
a. _____   b. _____

4. (Section 23.2) Determine which graphs are functions   (answer yes or no)

a _____   b. _____

5. (Section 23.2) Find the domain

a. $g(x) = 8 - x^2$

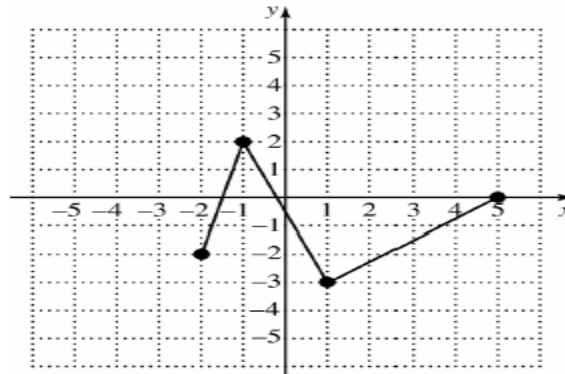b. $f(x) = \dfrac{4}{3x-2}$

a. _____   b. _____

6. (Section 23.2) For the graph of function f at right, determine

a) $f(1)$;
b) the domain;
c) all x-values such that $f(x) = 2$
d) the range.

a. _____   b. _____   c. _____   d. _____