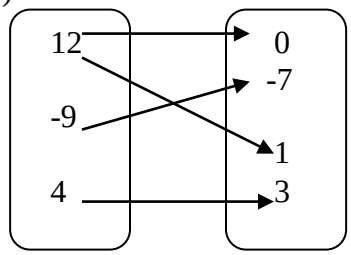
ALGEBRA II
REVIEW 1-1 & 1-2

Name _____ A#

For the following relations,
list the domain & range, then state if the relation is a function and whether it is discrete or cont.

1)

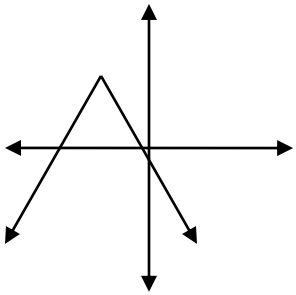


2) {(2,3), (3,2), (4,3), (5,2)}

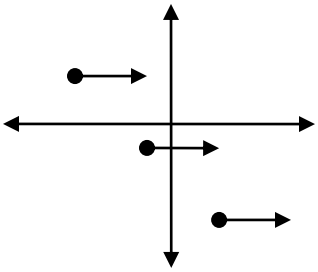
3) $y = x^3$

Use the vertical line test to determine if each graph represents a function (yes or no).

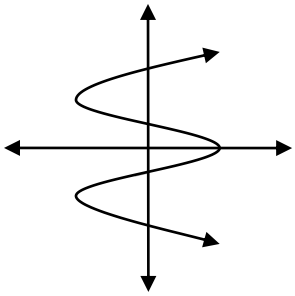
4) _____



5) _____



6) _____



Find each value for the following if $f(x) = \frac{2x+6}{-3}$ and $g(x) = x^2 - 3x$

7) f(-3) = _____

8) g(7) = _____

9) $f\left(\frac{3}{2}\right)$ = _____

10) g(-5) = _____

11) g(3n) = _____

12) f(a) = _____

If $h(x) = x^3 + 2x^2 - 1$, find each value.

13) h(0) = _____

14) $h\left(\frac{1}{2}\right)$ = _____

15) h(-3) = _____

Determine whether each equation is linear (yes or no).

16) $y = x^2 - 2$

17) $3x + 2y - 4 = 0$

18) $y = 10 + \frac{5}{x}$

19) $8x - 7\sqrt[3]{y} = 11$

20) $f(x) = \frac{2}{3}y - 5$

21) $y^5 - x^5 = 1$

Re-write the following equations in standard form (Ax + By = C). Remember, the x-term must be positive and there can be no fractions in your answer.

22) $8y - 4x = -7$

23) $y = 2x - 5$

24) $0 = 3y - 6x + 2$

25) $\frac{10x - 9y}{-3} = -12$

26) $\frac{x}{4} + \frac{3y}{5} = \frac{7}{10}$

Find the x & y-intercepts for each equation.

27) $4x + 5y = 40$

28) $y = 7x + 2$

30) $-4x = -24$

x-int = _____ x-int = _____ x-int = _____

y-int = _____ y-int = _____ y-int = _____

31) $2y - 21 = 3x$

32) $\frac{1}{2}x + 5y = 10$

33) $\frac{y + 2}{5} = -1$

x-int = _____ x-int = _____ x-int = _____

y-int = _____ y-int = _____ y-int = _____