# Warm Up

1) What do you know about this graph?

NF
NL
Discreta
D: {-5 ≤ x ≤ -1, x∈I}
R: {-1 ≤ y ≤ 5, y∈I}
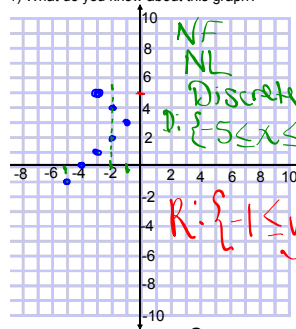
2) Would any of these be functions???

| domain | range |
|--------|-------|
| -3 | -6 |
| -2 | -1 |
| -1 | 0 |
| 0 | 3 |
| 1 | 15 |

NF

| domain | range |
|--------|-------|
| -3 | -6 |
| -2 | -1 |
| -1 | 0 |
| 0 | 3 |
| 1 | 15 |
| 16 | |

yes

2) $g(x) = 3x^2 - 5$  evaluate

i)  $g(-3)$
$= 3(3)^2 - 5$
$= 3(9) - 5$
$= 27 - 5$
$= 22$

ii)  $g(g(2))$
$g(2) = 3(2)^2 - 5$
$= 3(4) - 5$
$= 12 - 5$
$= (7)$

$g(7) = 3(7)^2 - 5$
$= 3(49) - 5$
$= 147 - 5$
$= 142$

iii)  $g(x) = 187$   x = ?

$g(x) = 3x^2 - 5$
$187 = 3x^2 - 5 \quad +5$
$192 = 3x^2$
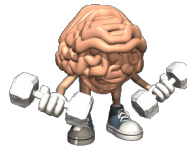$\frac{192}{3} = \frac{3x^2}{3}$
$\sqrt{x^2} = \sqrt{64}$
$x = 8$

# Warm Up

1)  $t(x) = 3x^2 + 5$         $p(x) = \frac{-3x - 1}{2}$

a) Evaluate
   $p(-5) \times t(4)$

$\frac{-3(-5) - 1}{2} = \frac{14}{7}$   X   $3(4)^2 + 5 = 53$   $= 371$

x = ?

b) Evaluate
   $p(x) = -17$   x = ?

$p(x) = \frac{-3x - 1}{2}$

$2(-17) = \frac{(-3x - 1)}{2} \cdot 2$

$-34 \quad +1 = -3x - 1 \quad +1$

$\frac{-33}{-3} = \frac{-3x}{-3}$

$11 = x$

c) Evaluate
   $t(x) = 113$

$113 \quad -5 = 3x^2 + 5 \quad -5$

$\frac{108}{3} = \frac{3x^2}{3}$

$\sqrt{36} = \sqrt{x^2}$

$x = 6$