

Name _____

For the following problems, use the functions: $f(x) = -2x + 9$, $g(x) = -8.8$, $h(x) = 3x^3 - x - 1$ to find...

1) $f(15)$

2) $h(-2)$

3) $g(0.75)$

4) the zero for $f(x)$

5) the zero for $g(x)$

6) the y-int for $h(x)$

7) Assume the table below contains data for a linear function.

a) determine the equation for the function f .

b) find $f(10)$

x	-12	-3	3	6
$f(x)$	-2	-5	-7	-8

Use the data given to find an equation for g . You may assume g is a linear function.

8) $g(1) = 3$ and $g(3) = 13$

9) $g(-5) = 2$ and $g(-2) = -7$

Simplify the following expressions.

10) $\sqrt{-9} + \sqrt{-49}$

11) $\sqrt{-16} \cdot \sqrt{-75}$

12) $\sqrt{\frac{12}{121}}$

13) $\frac{\sqrt{-8}}{\sqrt{-27}}$

14) $5\sqrt{45} - \sqrt{125}$

15) $3(4 + 2i) - (5 - 6i)$

16) $(1 - 2i)(4 + 3i)$

17) $(7 - 2\sqrt{-3})^2$

18) $\frac{2}{1 - i\sqrt{7}}$

19) $\frac{3 + 4i}{3 - 4i}$

20) i^{-7}

21) $(i^3)^4(i^5)^3$

Do you know your



chart?