Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**1.7 Homework**

**Simplify the following expressions.**

|  |  |  |
| --- | --- | --- |
| 1. $(3x -5) – (2x + 2)$
 | 1. $\left(x+5\right)+\left(2x-7\right)$
 | 1. $(x + 4)+(2x -4) –(5x +1)$
 |
| 1. $(x + 2)(3x -4)$
 | 1. $(3x -5)(2x +2)$
 | 1. $(x+5)(2x-7)$
 |

**Evaluate the following functions for f(-1), f(0), and f(3).**

|  |  |  |
| --- | --- | --- |
| 1. $f\left(x\right)= -2x+6$
 | 1. $f\left(x\right)=3\*2^{x}$
 | 1. $f\left(x\right)= x^{2}+3x+2$
 |
| 1. $f\left(x\right)= \frac{1}{2}x-\frac{3}{2}$
 | 1. $f\left(x\right)=2\*(-3)^{x}$
 | 1. $f\left(x\right)= -2x^{2}+3x-5$
 |

**For each of the following representations of a given function please state if it is Linear, Exponential, Quadratic or None.**

|  |  |  |
| --- | --- | --- |
| 13. | 14. | 15.  |
| 16. $f\left(x\right)= \frac{1}{2}x-\frac{3}{2}$ | 17. $f\left(x\right)=2\*(-3)^{x}$ | 18. $f\left(x\right)= -2x^{2}+3x-5$ |
| 19.

|  |  |
| --- | --- |
| $$x$$ | $$y$$ |
| -1 | 3 |
| 0 | 5 |
| 1 | 7 |
| 2 | 9 |

 | 20.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| x | -1 | 0 | 1 | 2 |
| y | 1 | 2 | 4 | 8 |

 | 21.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| $$x$$ | -1 | 0 | 1 | 2 |
| $$y$$ | 0 | -1 | 0 | 3 |

 |

**Look at the following pattern. Create a TABLE. Identify the type of function (Linear, exponential, or quadratic). Write the recursive and the explicit equation.**

|  |  |
| --- | --- |
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