Pre Calc Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

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WS Assessment

Target 1

* Function Basics
* Working with Functions
* Function Domain and Range
* Equations of a Line
* Graphing Functions

HW 1 Linear Function [www.deltamath.com](http://www.deltamath.com)

Evaluation function

Given function . Find *f* (2) *f* (2.05) .

(Value, Table, Function, and Manual)

Now your turn:

Show at least 4 different ways for stamp

Given rewrite the following as simplified polynomial

|  |  |  |
| --- | --- | --- |
| *f*(-x) | *f*(x) + 2 | *f*(x+2) |

Now you do:

|  |  |  |
| --- | --- | --- |
| *f*(2x) | *f*(x) – 2x | *f*(1 – x) |

Given rewrite *f*(x + h) as simplified polynomial

Given express in simplest form

Now you do.

Given express in simplest form

Given express in simplest form

Find domain and range for the following function graph

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

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

Find domain and range for the following function graph (desmos may help)

Graph this piecewise, state its domain and range show me for stamp. Sketch

Distance between two points

Midpoint formula

Find the distance and midpoint of the segment between A(-4, -3) and B(1, 1)

Find the distance from the point P(-3, 5) to the midpoint of the line segment between A(5, -2) and B(1, 6)

Use the distance formula to find an equation of the perpendicular bisector of the line segment between the points (4, 3) and (-2, 5)

Find the coordinates of the points one-third and two-thirds of the way from a = 2 to b = 8 on a number line

Find the coordinates of the points one-third and two-thirds of the way from the point (1, 2) to the point (7, 11) in the coordinate plane.

Linear equations

The slope of a line through the points (x1, y1) and (x2, y2) is given by

There are three forms that you need to master

1. Point-Slope Form: The line through the point (x1, y1) with slope m has equation

y – y1 = m(x - x1)

2. Slope-Intercept Form: The line with slope m and y-intercept b has equation

y = mx + b.

3. Standard form

ax + by = c (where a > 0)

Two lines with slopes m1 and m2 are **parallel** iff m1 = m2 (iff = if and only if);

and **perpendicular** iff (m1)((m2) = -1

Write equation of the line which passes through the point (8, - 2) and has y-intercept 5.

in Point-Slope form, Slope-Intercept form and Standard form. Hint: Find slope first

Write equation of the line which passes through the point (2, -6) and is parallel to the line

4x – 3y = 24 in Point-Slope form, Slope-Intercept form and Standard form (ax + by = c)

Write an equation of the line which passes through the point (-4, 3) and is perpendicular to the line 2x – 5y = 20 in Point-Slope form, Slope-Intercept form and Standard form (ax + by = c)

Now you do. Given point P(\_\_\_\_, \_\_\_\_\_) you fill in. Write the equation of line L parallel to the line 2x – 5y = 10 and pass thru P in a form of your choice. Then write the equation of another line M perpendicular to 2x – 5y = 10 in a different form. Show me graph of three lines for stamp.

**Target 1 Assessment**

Given

1. Find
2. Write *f* (x + 2) – 2 in simplest polynomial form
3. Express in simplest form
4. Graph *f* (x+2) – 2 for the domain [-5, 5] show me for stamp. Sketch and state the domain and range

Given point A(2, 3) and B(7, 6).

1. Find midpoint M
2. Write the equation of the line perpendicular to AB and pass thru midpoint M
3. Find the point P on this perpendicular line such that PM = AB