***MPM1D – My Parabola Polygraph*** Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| A |  | B |  | C |  | D |  |
| E |  | F |  | G |  | H |  |

For each question and answer, identify the lines that could be eliminated. Use the lines above.

|  |  |  |  |
| --- | --- | --- | --- |
| **#** | **Question** | **Answer** | **Eliminated** |
| 1. | Is the line increasing? | Yes |  |
| 2.  | Does the line pass through the origin? | No |  |
| 3.  | Is the line steep? | No |  |
| 4. | Is the line decreasing?  | Yes |  |
| 5.  | Is the line either horizontal or vertical? | Yes |  |
| 6.  | Is the line increasing and steep? | Yes |  |
| 7.  | Does the line have a positive y-intercept? | No |  |
| 8.  | Can you see the x-intercept in the picture? | Yes |  |

In each case, I will give you two lines that remain. Write a question that would let you win the game.

|  |  |  |
| --- | --- | --- |
| **Line 1** | **Line 2** | **Question** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

 For each question, draw three lines (one for yes, two for no). Use a ruler.

|  |  |  |  |
| --- | --- | --- | --- |
|  **Line 1 (Yes!)** | **Line 2 (No!)** | **Line 3 (No!)** | **Question** |
|  |  |  | Is the line steep and decreasing? |
|  |  |  | Does the line have a positive x-intercept and a positive y-intercept? |
|  |  |  | Does the line pass through 3 quadrants? |

|  |  |  |  |
| --- | --- | --- | --- |
| Steep | Not steep | Increasing | Decreasing |
| Vertical | Horizontal | x-intercept | y-intercept |
| Positive | Negative | Origin | Quadrant (1/2/3/4) |
| x-axis | y-axis |  |  |