***MFM2P – Finding Intercepts and Sketching Parabolas***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| AREA FORM 🡪 | Y-INTERCEPT  | 🡪BUILD RECTANGLE | 🡪LENGTH/  WIDTH FORM | 🡪X-INTERCEPTS (AND VERTEX?) | 🡪 SKETCH |
|  |  2 |  YES, DO IT!!! |  |  -2, -1 |  |

Using the process above, sketch the following parabolas.

|  |  |
| --- | --- |
| 1. Area form: y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_length/width form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_x-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_\_\_vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | Sketch |
| 1. Area form: y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_length/width form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_x-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | Sketch |
| 1. Area form: y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_length/width form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_x-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_\_\_vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | Sketch |
| 1. Area form: y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_length/width form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_x-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_\_\_vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | Sketch |
| 1. Area form: y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_length/width form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_x-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_\_\_vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | Sketch |
| 1. Area form: y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_length/width form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_x-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_\_\_vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | Sketch |
| 1. Area form: y-intercept: \_\_\_\_\_\_\_\_\_\_\_\_length/width form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_x-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_\_\_vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | Sketch |

***WHAT IF WE WERE GIVEN LENGTH-WIDTH FORM INSTEAD OF AREA FORM?***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| LENGTH/ 🡪WIDTH FORM  | X-INTERCEPTS (AND VERTEX?)  | 🡪BUILD 🡪 RECTANGLE (USING SIDE LENGTHS, THEN FILL IN AREA) | 🡪AREA FORM | 🡪 Y-INTERCEPT | 🡪 SKETCH |
|  |  -2, -1 |  |  |  2 |  |

|  |  |
| --- | --- |
| 1. Length/width form: x-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_area form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_y-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_\_\_vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | Sketch |
| 1. Length/width form: x-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_area form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_y-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_\_\_vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | Sketch |
| 1. Length/width form: x-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_area form: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_y-intercepts: \_\_\_\_\_\_\_\_\_\_\_\_\_\_vertex: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
 | Sketch |