## Math II - Zebra Pens (Part II)

Name $\qquad$

Carol is back! This time we will investigate different perimeters to see how they affect the areas of her enclosures.

1) What if Carol had 28 feet of fencing? Complete the table and graph your results.

| length (ft) | area ( $\mathrm{ft}^{2}$ ) | d |
| :---: | :---: | :---: |
| 0 |  |  |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |
| 4 |  |  |
| 5 |  |  |
| 6 |  |  |
| 7 |  |  |
| 8 |  |  |
| 9 |  | 10 |
| 10 | 40 | Example |
| 11 |  | 10 |
| 12 |  |  |
| 13 |  |  |
| 14 |  |  |



Write an explicit equation to match: Area $=($
 $)($
length width
2) What if Carol had 12 feet of fencing? Complete the table and graph your results.

| length (ft) | area (ft${ }^{\mathbf{2}}$ ) |
| :---: | :---: |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |

Write an explicit equation to match:

$$
\text { Area }=(\square)(\square)=
$$


3) What if Carol had $\mathbf{4 0}$ feet of fencing? Complete the table and graph your results.

| length (ft) | area (ft$\left.{ }^{2}\right)$ |
| :---: | :---: |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |
| 9 |  |
| 10 |  |
| 11 |  |
| 12 |  |
| 13 |  |
| 14 |  |
| 15 |  |
| 16 |  |
| 17 |  |
| 18 |  |
| 19 |  |
| 20 |  |



Write an explicit equation to match:

$$
\text { Area }=(\square)(\square)=
$$

4) What if Carol had 16 feet of fencing? Complete the table and graph your results.

| length (ft) | area (ft²) |
| :---: | :---: |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 6 |  |
| 7 |  |
| 8 |  |



