


 Can't be 0 or 1 because otherwise  $\text{purple square} \times \text{purple square} \times \text{purple square} = \text{purple square}$


 Can't be 3 or bigger because otherwise  $\text{purple square} \times \text{purple square} \times \text{purple square} > 12$



Therefore  = 2

Since  $\text{purple square} \times \text{purple square} \times \text{purple square} = \text{yellow semi-circle}$ ,  $\text{yellow semi-circle} = 8$

We know  $2 \times \text{orange oval} = 8$ , so  $\text{orange oval} = 4$

 Can't be 0 or 1 because otherwise  $\text{blue rectangle} \times \text{blue rectangle} = \text{blue rectangle}$


 Can't be 4 or bigger, otherwise  $\text{blue rectangle} \times \text{blue rectangle} > 12$

Therefore,  = 3 and  = 9

Since  $\text{blue rectangle} \times \text{orange oval} = \text{red circle}$ ,  $\text{red circle} = 12$












Since  $\text{blue rectangle} \times \text{purple square} = \text{green triangle}$ ,  $\text{green triangle} = 6$

$\text{blue rectangle} \times \text{yellow diamond} = \text{blue rectangle}$ , so  $\text{yellow diamond} = 1$

 = 0 since there is only one way that something times 8 is equal to itself

Since  $\text{purple square} \times \text{purple star} = \text{blue hexagon}$  and 10 is the only even number left,

$\text{blue hexagon} = 10$  and 10 divided by 2 is 5, so  $\text{purple star} = 5$

0=  1=  2=  3=  4=  5=  6=  7= 8=   
9=  10=  11= 12= 

11 and 7 do not have shapes