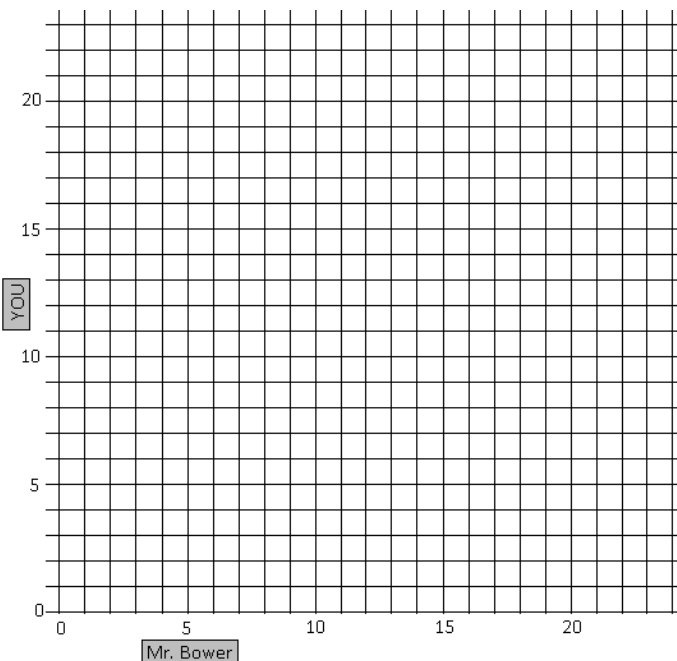


1. In this activity, the total student quantity of cookies and Mr. Bower's quantity of cookies must always multiply to equal 24.
2. Mr. Bower has _____ cookies, so you must have _____ cookies.
3. Graph this ordered pair (x is Mr. Bower's cookies, y is your cookies).
4. Mr. Bower has changed his amount of cookies. Now Mr. Bower has _____ cookies, so you must have _____ cookies.
5. Graph this ordered pair.
6. Mr. Bower has another new amount of cookies. Now Mr. Bower has _____ cookies, so you must have _____ cookies.
7. Graph this ordered pair.
8. Mr. Bower's cookies total is different again. Now Mr. Bower has _____ cookies, so you must have _____ cookies.
9. Graph this ordered pair.
10. There is another new cookie situation. Now Mr. Bower has _____ cookies, so you must have _____ cookies.
11. Graph this ordered pair.
12. When Mr. Bower's quantity of cookies increases, what happens to your quantity of cookies? _____
13. When Mr. Bower's quantity of cookies decreases, what happens to your quantity of cookies? _____
14. When your quantity of cookies increases, what happens to Mr. Bower's quantity of cookies? _____
15. When your quantity of cookies decreases, what happens to Mr. Bower's quantity of cookies? _____
16. Look at the graph you made. Is it curved or straight? _____



INVERSE VARIATION

$$y = \frac{k}{x}$$

k is a number called the *constant of variation*

You might notice that this also means

$$xy = k$$