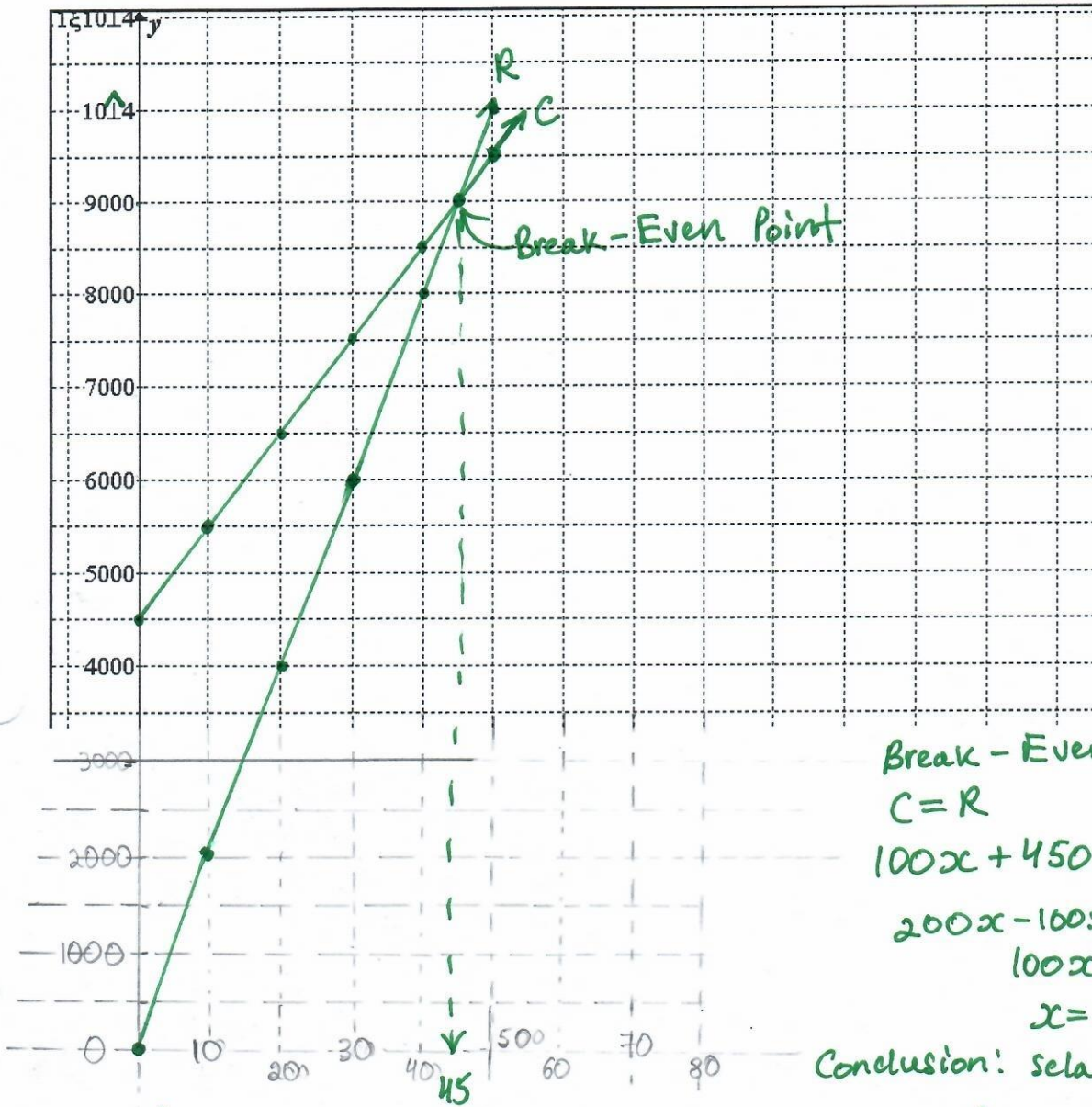


Example: The Porter Company manufactures windsurfers. It costs \$100 to make one windsurfer. The fixed (overhead) costs are \$4500. Each windsurfer can be sold for \$200.

- (a) How many windsurfers must be made and sold for the Porter Company to break even?  
 (b) How many windsurfers must be made and sold to realize a profit of \$5000?



let  $x$  represent the number of windsurfers produced and sold.

$$C = 100x + 4500$$

$$R = 200x$$

#### Practice

1. The Smith Company makes picnic tables. It costs \$50 to make one table and the fixed overhead cost is \$3000. Each table can be sold for \$70.

- (a) How many picnic tables must be made and sold for the Smith Company to break even?  
 (b) How many picnic tables must be made and sold to realize a profit of \$10000?

Answers:

1. (a) 150

(b) 650