



# Station A

Tammy and Lisa work in different retail shops. Tammy makes \$10 per hour plus \$0.50 for each item she sells, and Lisa makes \$5 per hour plus \$1 for each item she sells. How many items would Tammy and Lisa need to sell in one hour in order for both girls to make the same amount of money during that hour?

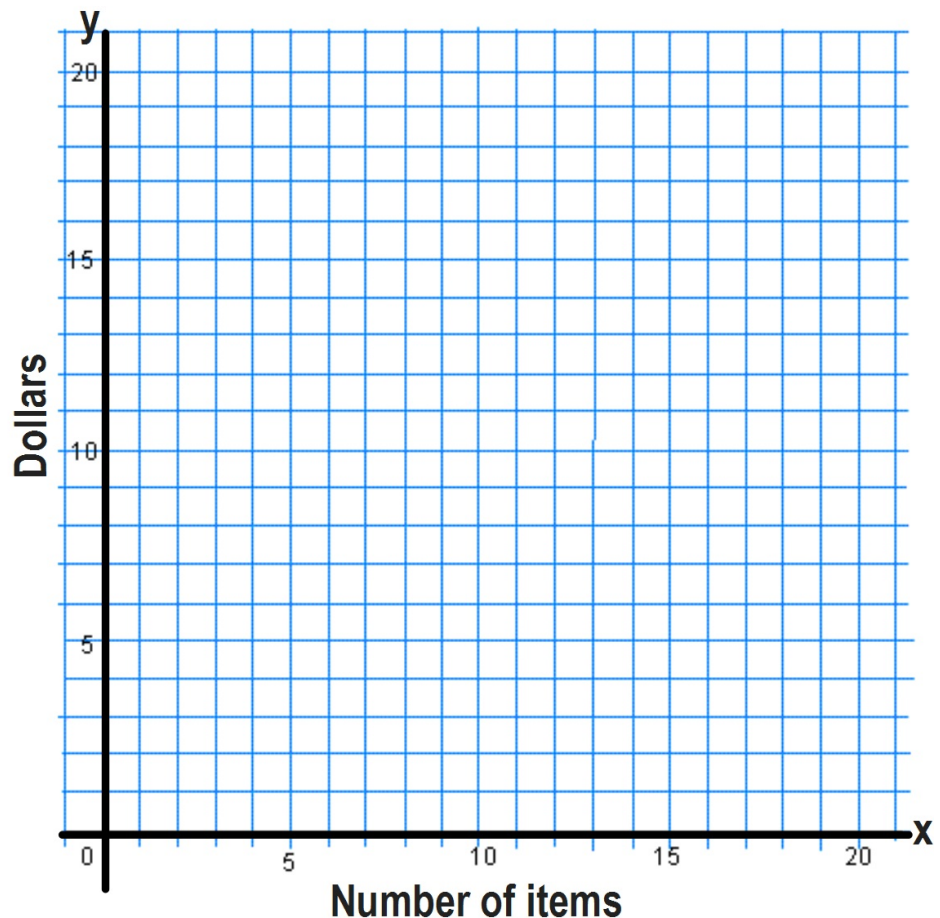
If  $y$  represents dollars and  $x$  represents the number of items, write a linear system that represents Tammy and Lisa's above situations.

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Now graph the system on the grid below. Be sure to label:

- Each axis
- Each line
- the solution to the system



**What is the solution and what does it mean?**



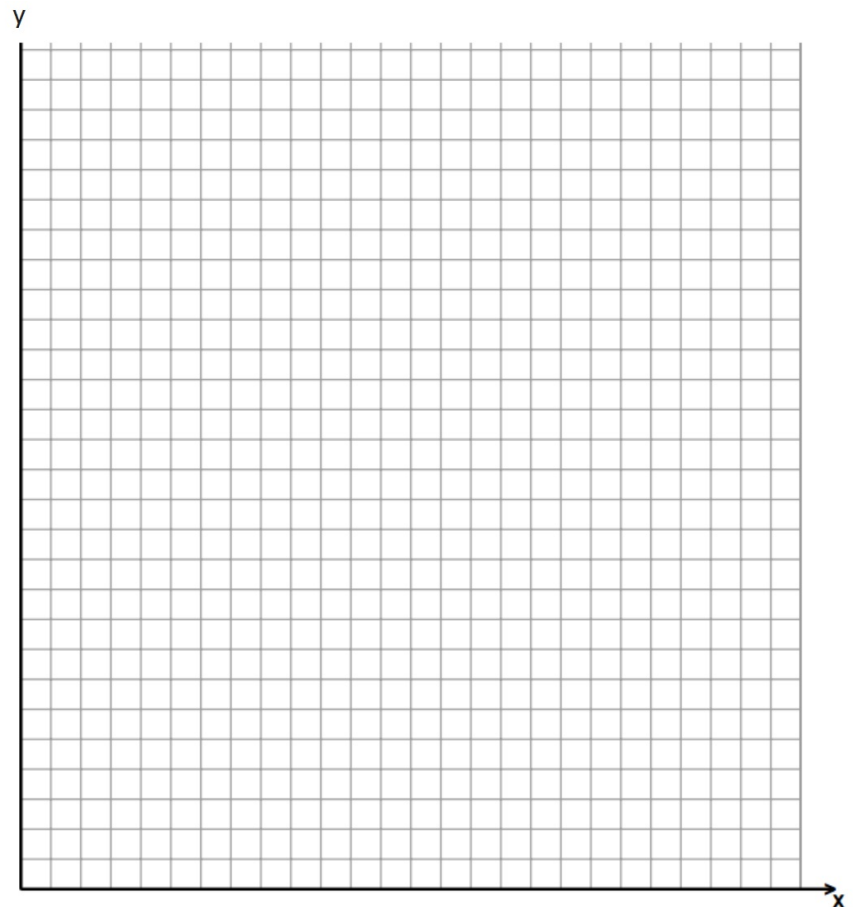
# Station B

Mrs. Nicholson is a dance teacher whose students are going to have a recital. She is comparing two companies' prices for filming the recital and producing DVDs. Robbie's Productions charges \$5 per DVD, plus \$40 to come and film the recital. Summerfield Media charges \$60 to film, plus \$3 per DVD. To decide which company to use, Mrs. Nicholson determines the number of DVDs that would make the two options equivalent in terms of cost. How much would each option cost?

If  $y$  represents dollars and  $x$  represents the number of DVDs, write a system of equations, graph them, and write the solution.

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**What is the solution and what does it mean?**

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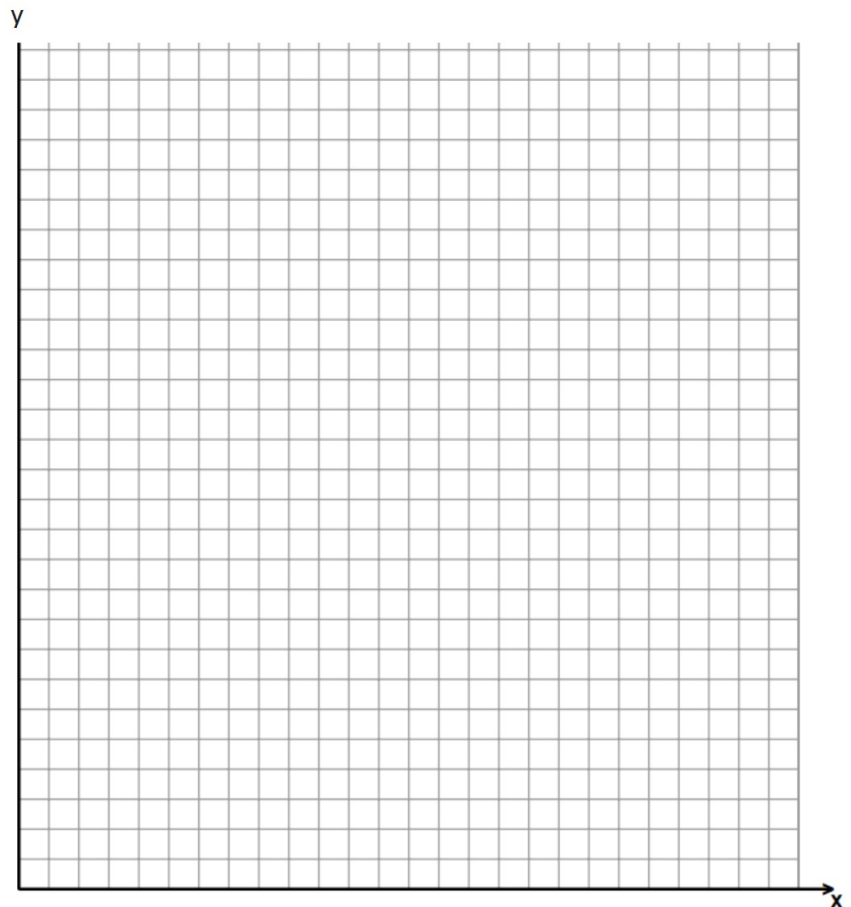
# Station C

Dustin and his good buddy Kevin are both mechanics at a shop that does oil changes. They are in a friendly competition to see who can complete the most oil changes in one day. Dustin has already finished 5 oil changes today, and can complete more at a rate of 2 oil changes per hour. Kevin just came on shift, and can finish 3 oil changes every hour. Sometime during the day, the friends will be tied, with the same number of oil changes completed.

If  $y$  represents the number of oil changes and  $x$  represents the number of hours, write a system of equations, graph them, and write the solution.

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**What is the solution and what does it mean?**

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