Name_____ Date_____

Radical Rocks

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You and your friends are planning an adventure at Radical Rocks for a fun-filled day of rock climbing. The cost is $8 per hour plus $13 for full-day equipment rental. The rental includes a harness, shoes, belay device and a chalk bag.

Write an equation to represent your total cost for the day.

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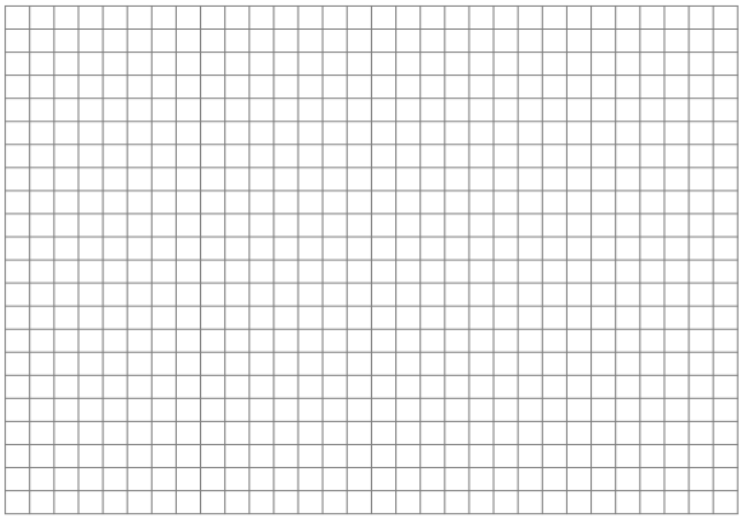
1) **You found an online coupon that offers a $6.00 discount on the full-day equipment rental. How does this change your equation above? Write a new equation.**

2) **Your friend received a coupon in the mail offering a 40% discount off the hourly rate? How does this change your original equation above? Write a new equation.**

3) **Graph the equations from Questions 1 and 2 above. Choose a scale and label the axes.**



4) **Which coupon offered the better deal? Use the graph to support your conclusion.**

5) **You have a total of $35.00 to spend. How many hours can you purchase for the day?**

- **Find the number of hours for the equations in Question1 and Question 2 on the previous page.**

- **Does this support your conclusion from Question 4? Justify your answer.**

6) **Refer to your graph, did the two lines intersect?**

   If so, what is the approximate coordinate for the point of intersection?

   What does this point represent within the context of this problem?