

IM 3

Chapter 2 Review 2

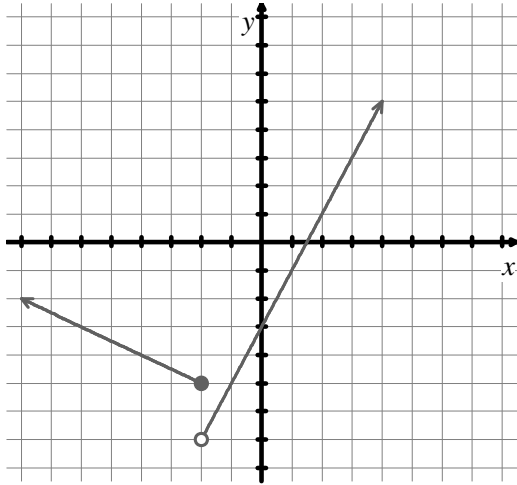
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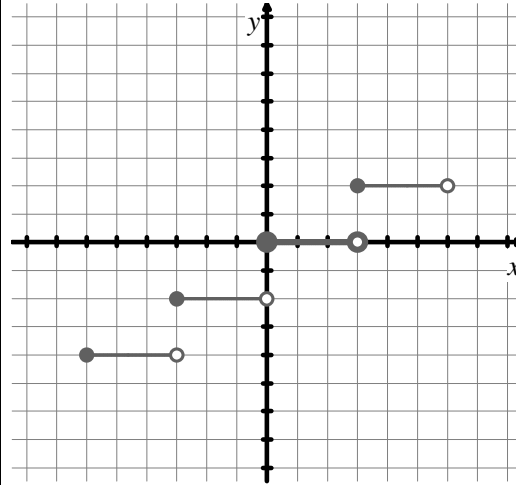
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Show ALL work in the space provided.

1. Write a Piecewise function from the graph.



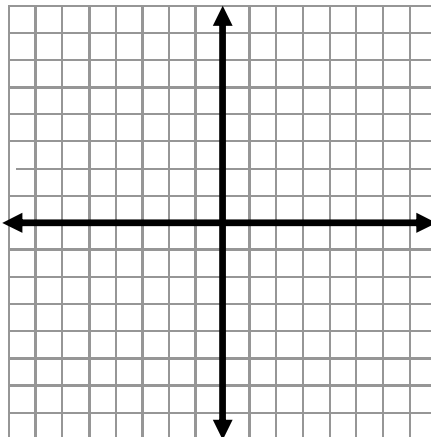
2. Write a Piecewise function from the graph.



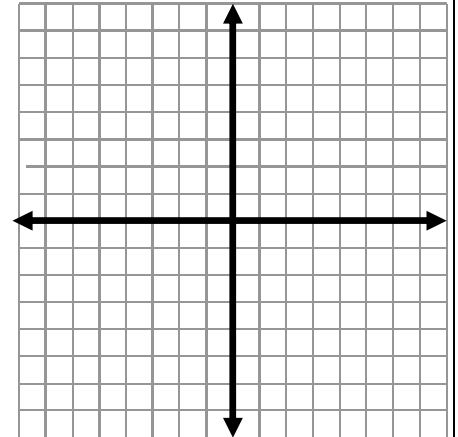
3. The newest park in Kerman is a rectangular with a perimeter of 180 yards. The length of the field is 8 yards less than three times the width. What are the dimensions of the field?

4. You have 35 coins in your pocket, all nickels and dimes which totals \$2.35. How many dimes and nickels do you have?

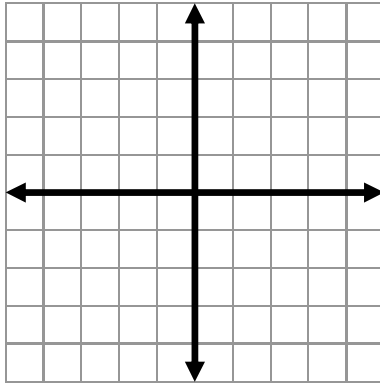
5. Graph $y = \frac{2}{3}|x+3|-2$. State the vertex and axis of symmetry.



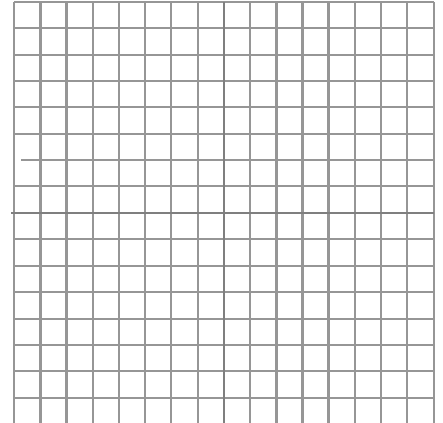
6. Graph $-7x - 5y < 35$



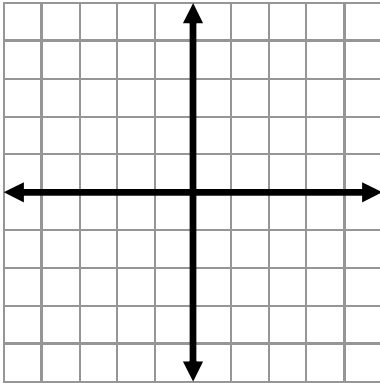
7. Graph $\begin{cases} y < -\frac{1}{3}x + 1 \\ y \geq 2|x - 1| \end{cases}$



8. A gardener wants to plant at least 50 tulips and rosebushes in a garden, but no more than 20 rosebushes. Write and solve a system of inequalities to model the situation.



9. Graph $\begin{cases} y > |x - 1| - 1 \\ y \leq -|x - 3| + 4 \end{cases}$



10. A stadium has 49,000 seats. Seats sell for \$25 in Section A, \$20 in Section B, and \$15 in Section C. The number of seats in Section A equals the total number of seats in Sections B and C. Suppose the stadium takes in \$1,052,000 from each sold-out event. How many seats does each section hold?

11. Laser tag at No Surrender costs \$12.00 per hour plus \$5.00 for equipment. Laser tag at Blackbeard's costs \$10.00 per hour and \$9.00 for equipment. Write and solve an equation to find where the game costs are the same. How long will it take and how much is the cost?