33. ⬥ **TAKS REASONING** Which statement is true for the function whose graph is shown?
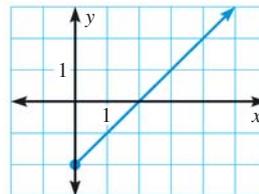
　　Ⓐ　The domain is unrestricted.

　　Ⓑ　The domain is $x \le -2$.

　　Ⓒ　The range is $y \le -2$.

　　Ⓓ　The range is $y \ge -2$.

34. CHALLENGE If $(3, n)$ is a solution of $Ax + 3y = 6$ and $(n, 5)$ is a solution of $5x + y = 20$, what is the value of A?

PROBLEM SOLVING

35. BAKING The weight w (in pounds) of a loaf of bread that a recipe yields is given by the function $w = \frac{1}{2}f$ where f is the number of cups of flour used. You have 4 cups of flour. Graph the function and identify its domain and range. What is the weight of the largest loaf of bread you can make?

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36. TRAVEL After visiting relatives who live 200 miles away, your family drives home at an average speed of 50 miles per hour. Your distance d (in miles) from home is given by $d = 200 - 50t$ where t is the time (in hours) spent driving. Graph the function and identify its domain and range. What is your distance from home after driving for 1.5 hours?

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37. EARTH SCIENCE The temperature T (in degrees Celsius) of Earth's crust can be modeled by the function $T = 20 + 25d$ where d is the distance (in kilometers) from the surface.

　a. A scientist studies organisms in the first 4 kilometers of Earth's crust. Graph the function and identify its domain and range. What is the temperature at the deepest part of the section of crust?

　b. Suppose the scientist studies organisms in a section of the crust where the temperature is between 20°C and 95°C. Graph the function and identify its domain and range. How many kilometers deep is the section of crust?

38. MULTI-STEP PROBLEM A fashion designer orders fabric that costs $30 per yard. The designer wants the fabric to be dyed, which costs $100. The total cost C (in dollars) of the fabric is given by the function

$$C = 30f + 100$$

where f is the number of yards of fabric.

　a. The designer orders 3 yards of fabric. How much does the fabric cost? *Explain.*

　b. Suppose the designer can spend $500 on fabric. How many yards of fabric can the designer buy? *Explain.*

⚪ = **WORKED-OUT SOLUTIONS**
　on p. WS1

⬥ = **TAKS PRACTICE AND REASONING**

◈ = **MULTIPLE REPRESENTATIONS**