60. ⭐ **TAKS REASONING** A financial advisor suggests that if a person is an aggressive investor, the percent y of money that the person invests in stocks should be greater than the difference of 110 and the person's age x.

    a. Graph Write and graph a linear inequality that relates the percent of money invested in stocks to an aggressive investor's age.

    b. Calculate If an aggressive investor is 30 years old, what are the possible percents that the investor can invest in stocks? *Explain* your answer.

    c. Justify Are there any ages for which none of the solutions of the inequality makes sense for this situation? *Justify* your answer.

61. CHALLENGE The formula $m = dV$ gives the mass m of an object in terms of the object's density d and its volume V. Water has a density of 1 gram per cubic centimeter. An object immersed in water will sink if its density is greater than the density of water. An object will float in water if its density is less than the density of water.

    a. For an object that sinks, write and graph an inequality that relates its mass (in grams) to its volume (in cubic centimeters). For an object that floats, write and graph an inequality that relates its mass (in grams) to its volume (in cubic centimeters).

    b. A cylindrical can has a radius of 5 centimeters, a height of 10 centimeters, and a mass of 2119.5 grams. Will the can sink or float in water? *Explain* your answer.

MIXED REVIEW FOR TAKS

62. ⭐ **TAKS PRACTICE** $\triangle FGH$ has vertices $F(-2, 3)$, $G(-1, 2)$, and $H(-2, -1.5)$. $\triangle FGH$ is dilated by a scale factor of 2 and has the origin as the center of dilation. What are the coordinates of H'? *TAKS Obj. 6*

    (A) $(-4, -3)$ **(B)** $(-4, 6)$ **(C)** $(-1.5, -2)$ **(D)** $(0, 0.5)$

63. ⭐ **TAKS PRACTICE** What is the y-intercept of the function $f(x) = 4(x - 3)$? *TAKS Obj. 3*

    (F) -12 **(G)** -3 **(H)** 3 **(J)** 4

QUIZ *for Lessons 6.5–6.7*

Solve the equation. *(p. 390)*

    1. $|x| = 5$ **2.** $|c - 8| = 24$ **3.** $-2|r - 5| = -6$

Solve the inequality. Graph your solution. *(p. 398)*

    4. $|y| > 4$ **5.** $|2t - 5| < 3$ **6.** $4|3s + 7| - 5 \geq 7$

Graph the inequality. *(p. 405)*

    7. $x + y \geq 3$ **8.** $\frac{5}{7}x < 10$ **9.** $2y - x \leq 8$