NAME _____ DATE _____ PERIOD _____

6

Chapter 6 Cumulative Review

(Chapters 1–6)

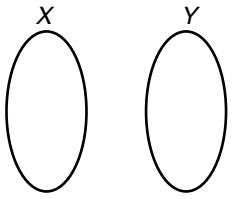
1. Simplify $4(2y + 5) + 6(4y + 3)$. (Lesson 1–6) **1.** _____

2. Name the set or sets of numbers to which the real number 0 belongs. (Lesson 2–7) **2.** _____

3. Solve $3x = \frac{2}{3}$. (Lesson 3–3) **3.** _____

4. State whether the percent of change is a percent of increase or a percent of decrease. Then find the percent of change. (Lesson 3–7)
original: 76
new: 57 **4.** _____

5. Express the relation $\{(-2, 1), (3, -1), (2, -2), (-2, 0)\}$ as a mapping. Then write the inverse of the relation. (Lesson 4–3) **5.**



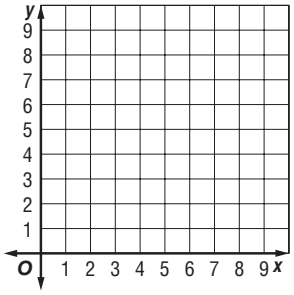
6. Determine whether the sequence $-6, -3, 0, 3 \ldots$ is an arithmetic sequence. If it is, state the common difference. (Lesson 4–7) **6.** _____

7. Find the slope of the line that passes through $(-2, 0)$ and $(5, -8)$. (Lesson 5–1) **7.** _____

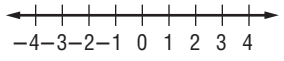
8. The Lopez family drove 165 miles in 3 hours. Write a direct variation equation for the distance driven in any time. How far can the Lopez family drive in 5 hours? (Lesson 5–2) **8.** _____

9. Write an equation of a line that passes through $(-2, -1)$ with slope 3. (Lesson 5–4) **9.** _____

10. Draw a scatter plot of the relation, and determine what relationship exists, if any, in the data. (Lesson 5–7)
$\{(1, 5), (1, 8), (2, 7), (3, 5), (3, 8), (4, 4), (5, 3), (5, 5), (6, 2), (7, 4), (8, 1), (9, 2)\}$ **10.**



11. Solve $12 + r < 15$. Then graph the solution. (Lesson 6–1) **11.** _____



12. Solve $\frac{2u - 15}{7} \geq 3$. (Lesson 6–3) **12.** _____

13. Define a variable, write a compound inequality, and solve the problem. (Lesson 6–4)
Seven less than twice a number is greater than 13 or less than or equal to −5. **13.** _____

14. Solve $|3x + 4| \leq 5$. Then graph the solution set. (Lesson 6–5) **14.** _____