CHAPTER 11

NAME _____ DATE _____

# Chapter Review Games and Activities

**For use after Chapter 11**

**Solve each of the problems below. Place the number of the question on the line in the box where you find the correct answer. When the puzzle is completed correctly, the sum of each row, column, and diagonal should be the same.**

1. Solve the proportion: $\frac{x}{3} = \frac{5}{7}$

2. Solve the proportion: $\frac{4}{7} = \frac{x-3}{1}$

3. 22 is 80% of what?

4. 32 is what percent of 56?

5. If $x$ is 8 when $y$ is 18, and $x$ and $y$ vary directly, what is the value of $y$ when $x$ is 10?

6. If $x$ is 15 when $y$ is 48, and $x$ and $y$ vary inversely, what is the value of $x$ when $y$ is 132?

7. Simplify: $\frac{9x-6}{21x-14}$

8. Simplify: $\frac{6x^2-13x-5}{24x-8}$

9. Simplify: $\frac{27x^2}{8x^3} \cdot \frac{32x^5}{9x}$

10. Simplify: $\frac{10x^2}{x^2-4} \div \frac{16x}{x^2+3x+2}$

11. Simplify: $\frac{3x+1}{7x} - \frac{x}{5x}$

12. Simplify: $\frac{-3x+4}{x^2-25} + \frac{6}{x-5}$

13. Simplify: $\frac{x^2+2x-3}{x+3}$

14. Simplify: $\frac{12x^2-13x-14}{3x+2}$

15. Solve: $\frac{1}{8} - \frac{3}{x} = \frac{4}{x}$

16. Solve: $\frac{5}{x+4} + \frac{7}{8} = \frac{2x+3}{3x+12}$

| | | | |
|---|---|---|---|
| $\frac{3x+34}{x^2-25}$ _____ | $x-1$ _____ | $2\frac{1}{7}$ _____ | $\frac{2x+5}{8}$ _____ |
| $5\frac{5}{11}$ _____ | $27\frac{1}{2}$ _____ | 56 _____ | $\frac{5(x+1)}{8(x-2)}$ _____ |
| $\frac{3}{7}$ _____ | $3\frac{4}{7}$ _____ | $4x-7$ _____ | $\frac{8x+5}{35x}$ _____ |
| $12x^3$ _____ | $-36$ _____ | $57\frac{1}{7}$ _____ | $22\frac{1}{2}$ _____ |