**Chapter 8 Mid-Chapter Practice Test** SCORE \_\_\_\_\_\_\_\_\_\_\_\_\_

*(Lessons 8-1 through 8-3)*

**Part I Write the letter for the correct answer in the blank at the right of each question*.***

 **1.** For what value(s) of *x* is the expression $\frac{x(x - 5)}{(x + 2)(x^{2} - 16)}$ undefined?

**For Questions 2-5, simplify each expression.**

 **2.** $\frac{4y^{2} - 1}{3y - 1} ∙ \frac{1 - 3y }{2y+ 1}$

 **3.** $\frac{x^{2} - 6x + 8}{3x - 12}$ ÷ $\frac{x^{2} - 4 }{x^{2} + 5x + 6}$

 **4.** $\frac{\frac{4m^{2} - 36}{6m^{2} + 18 }}{\frac{2m - 6}{3m^{2} + 9}}$

 **5.** $\frac{1}{6}$ – $\frac{5}{15w}$+ $\frac{3}{10w}$

**Part II**

 **6.** Simplify $\frac{x}{x^{2} + 5x+ 6}$ – $\frac{1}{x^{2}+ x-6}$.

**For Questions 7 and 8, find the LCM for each set of polynomials.**

 **7.** 12$a^{2}$, 15$b^{3}$, 20*a*$b^{2}$ **8.** 5$x^{2}$ – 20, 3*x* + 6

 **9.** Determine the equations of any asymptotes in the graph of *f*(*x*) = $\frac{x^{2} + 4x }{ x^{2} + 4x - 12}$

**10.** Graph *f*(*x*) = $\frac{-2}{x + 4}$.

 **1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **9. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**10.**