**Chapter 10 Mid-Chapter Practice Test** SCORE \_\_\_\_\_\_\_\_\_\_\_

*(Lessons 10-1 through 10-4)*

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

 **1.** Which expression has a range of { *y* | *y* ≥ 2}?

 **A** *y* = $\sqrt{x-2}$ **B** *y* = $\sqrt{x+2}$ **C** *y* = $\sqrt{x}$ – 2 **D** *y* = $\sqrt{x}$ + 2

 **2.** Which expression has a domain of {*x* | *x* ≥ 1}?

 **F** *y* = $\sqrt{x-1}$ **G** *y* = $\sqrt{x + 1}$ **H** *y* = $\sqrt{x}$ – 1 **J** *y* = $\sqrt{x}$ + 1

**For Questions 3–5, simplify each expression.**

 **3.** $\sqrt{242}$

 **4.** $\sqrt{50x^{2}y^{3}}$

 **5.** $\sqrt{\frac{t}{12}}$

 **6.** Solve $\sqrt{9n-2}$ – *n* = 2.

 **7.** Solve $\sqrt{3b-7}$= $\sqrt{9 - b}$

**Part II**

**Simplify each expression.**

 **8.** $\sqrt{14}$ (3$\sqrt{2}$ – 5$\sqrt{7}$ ) **9.** (4$\sqrt{3}$ + 5) (4$\sqrt{3}$ – 5)

**10.** $\sqrt{242}$ + 3$\sqrt{162 }$ **11.** 7$\sqrt{3}$ – 4$\sqrt{6}$ – $\sqrt{3}$

**12.** 3$\sqrt{32}$ – 2$\sqrt{128}$ + $\sqrt{98}$

**For Questions 13 and 14, solve each equation.**

**13.** 3$\sqrt{3x}$– 2 = 10 **14.** $\sqrt{x - 4}$ = *x* – 9

**15.** A square has an area of 75 square inches. The formula for the area *A* of a square with side length *ℓ* is *A* = $l^{2}$. Find the length of one side of the square.

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

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

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

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

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

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

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

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

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

**10**. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**11**. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**12**. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**13**. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**14**. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**15**. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_