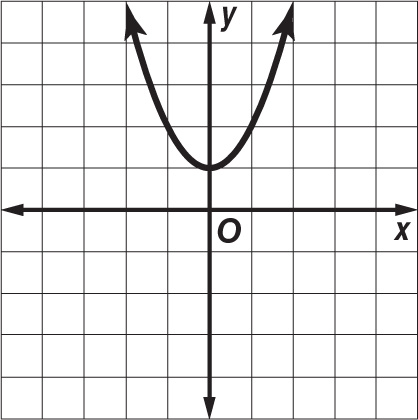
**Chapter 9 Mid-Chapter Test** SCORE \_\_\_\_\_\_\_\_\_\_\_

*(Lessons 9-1 through 9-5)*

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

** 1.** Which equation corresponds to the graph shown?

**A** *y* = – 1 **C** *y* = + 1

**B** *y* = **D** *y* =

**2.** Find the coordinates of the vertex of the graph of

*y* = – 8*x* + 10. Identify the vertex as a maximum

or a minimum.

**F** (4, –6); minimum **H** (4, 6); maximum

**G** (–4, 58); maximum **J** (–4, 26); minimum

**3.** Solve – 24*x* + 144 = 36 by taking the square root of each side.

**A** –6, 18 **B** 6, 18 **C** 6, 12 **D** –6, 6

**4.** Which equation can be used to solve 5 + 30*b* – 10 = 0 by completing the square?

**F**  = 38 **G**  = 46 **H**  = 11 **J**  = 19

**5.** Which step is *not* performed in the process of solving + 8*r* + 5 = 0 by completing   
the square?

**A** Subtract 5 from each side. **C** Add 16 to each side.

**B** Factor + 8*r*. **D** Take the square root of each side.

**Part II**

**Solve each equation by graphing. If integral roots cannot be found, estimate the roots to the nearest tenth.**

**6.**  – 7*x* – 8 = 0

**7.**  + 1 = 5*x*

**For Questions 8 and 9, round to the nearest tenth if necessary.**

**8.** Solve + 4*x* = 20 by completing the square.

**9.** Solve –2 + 18 = 7*x* by using the Quadratic Formula.

**10.** The base of a rectangle is 4 more than the height. The area of the rectangle is 15 square inches. What are the dimensions of the rectangle to the nearest tenth of an inch?

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

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

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

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

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

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

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

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

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

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