**STUDY GUIDE: Rational Numbers and the Coordinate Plane**  Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_ Block: \_\_\_\_\_

D: \_\_\_\_\_\_\_\_ P: \_\_\_\_\_\_\_\_ **1**. Write as a decimal and a percent.

D: \_\_\_\_\_\_\_\_ P: \_\_\_\_\_\_\_\_  **2**. Write − as a decimal and a percent.

D: \_\_\_\_\_\_\_\_ P: \_\_\_\_\_\_\_\_ **3**. Jake won 13 of the 15 races he ran. Write Jake’s fraction of wins as a decimal and a percent.

\_\_\_\_\_\_\_\_  **4.** Use <, > or = to compare the rational numbers. 2 ⃝

\_\_\_\_\_\_\_\_ **5**. Order − 8.6, 8, −8, and 8. from least to greatest.

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6**. Order from least to greatest.

F: \_\_\_\_\_\_\_\_ P: \_\_\_\_\_\_\_\_ **7.** Write 0.048 as a fraction in simplest form and a percent.

\_\_\_\_\_\_\_\_ **8.** Write -3.415 as an **improper** fraction in simplest from.

F: \_\_\_\_\_\_\_\_ D: \_\_\_\_\_\_\_\_ **9.** Write 48% as a fraction in simplest form and a decimal.

F: \_\_\_\_\_\_\_\_ D: \_\_\_\_\_\_\_\_ **10.** Write 0.65% as a fraction in simplest form and a decimal.

F: \_\_\_\_\_\_\_\_ D: \_\_\_\_\_\_\_\_ **11.** Write 185% as a fraction in simplest form and a decimal.

\_\_\_\_\_\_\_\_ **12.** Find the distance between (-7, 4) and (-7, 9).

\_\_\_\_\_\_\_\_ **13.** Find the distance between (5, -9) and (5, 2).

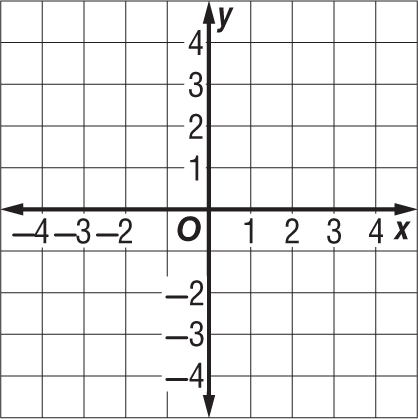
\_\_\_\_\_\_\_\_ **14**. Which of the following correctly identifies the quadrant where the point named by (9, 3) is located?

**F**. Quadrant I **H**. Quadrant III

**G**. Quadrant II **I**. Quadrant IV

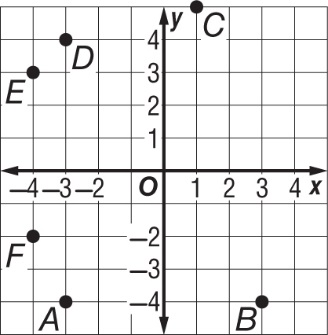
**Graph each point on a coordinate plane to the right. (Write the letter beside the point on the coordinate plane.) Then identify which quadrant or axis the point is in/on.**

**15**. *P* (−3, 4), Quadrant \_\_\_\_\_



**16**. *Q* (2, −4), Quadrant \_\_\_\_\_

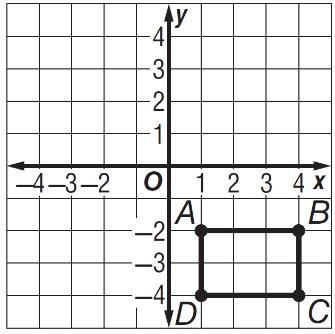
**17.** *R* (3, 0), Quadrant \_\_\_\_\_

**For Exercises 18-19, use the coordinate plane at the right.**

\_\_\_\_\_\_\_\_  **18**. Identify the point for the ordered pair (−4, 3).

**(\_\_\_\_,\_\_\_\_) 19**. Write the **ordered pair** that names point *A*.

**The coordinate plane at the right shows the location of the YMCA. For Exercises 20-22, you may graph on the coordinate plane, but write your ordered pair answers in the blank.**

**(\_\_\_\_,\_\_\_\_)** **20**. An oak tree is located at the reflection of point *C* across the *y*-axis. What **ordered pair** describesthe location of the oak tree?

**(\_\_\_\_,\_\_\_\_) 21**. A sprinkler is located at the reflection of point *A* across the *x*-axis. What **ordered pair** describesthe location of the sprinkler?

**(\_\_\_\_,\_\_\_\_) 22**. A fire pit is located at the reflection of point *B* about the *y*-axis. What **ordered pair** describes thelocation of the fire pit?