Name _____ Core _____ Date _____

Real Number Problem Set   **Due Date** _____

Show work OR write an explanation of how you arrived at your answer. Work or explanation is required for each problem to receive credit!!
Write the letter of your final answers in the answer box. You may use a calculator.

1. Which is a rational number and an integer but *not* a whole number?

     A $-\dfrac{5}{4}$ **B** -1.03   **C** $-(7^2)$ **D** $\sqrt{42}$

2. Which number is irrational?

     A. 1.6739   B. $\sqrt{14}$ C. $6.\overline{23}$ D. $\dfrac{8\pi}{\pi}$

3. Which number is rational?

     A. π B. $\sqrt{5}$ C. -9   D. $2\sqrt{6}$

4. Which number is an integer?

     A. $\sqrt{16}$ B. $\sqrt{27}$ C. $-\sqrt{10}$ D. $\sqrt{117}$

5. Which is a proper classification of -9.21?

     A. Rational and negative

     B. Irrational and decimal

     C. Irrational and negative

     D. Rational and integer

6. Which is a proper classification of -6.789......?

     A. Rational and whole

     B. Rational and integer

     C. Irrational and integer

     D. Irrational and real

7. Which of the following answers describes the set of numbers that –64 belongs to?

     A. Prime

     B. Integers only

     C. Irrational only

     D. Both integers and rational

8. Which is an irrational number?

     A −7.171771777...   **B** $\sqrt{49}$ **C** $\sqrt{-49}$ **D** $-\sqrt{49}$

9. Which name does *not* apply to $\dfrac{\sqrt{16}}{2}$?

     A integer   **B** irrational number
     C rational number   **D** real number

10. Which number is between 14 and 15?

     A. $\sqrt{200}$ B. $\sqrt{190}$ C. $\sqrt{100}$ D. $\sqrt{228}$

Answers

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____