

- Which of these sets of numbers contains no rational numbers?
 - $12, \frac{1}{2}, -13$
 - $-3.5041, \sqrt{99}, 0.143635$
 - $-6, -\sqrt{225}, 4\frac{7}{8}$
 - $\sqrt{81}, 0.75, 0$
- What is the best classification for -4 ?
 - irrational number, real number
 - integer, rational number, real number
 - whole number, integer, real number
 - rational number, real number
- Which of the following square roots is an irrational number?
 - $-\sqrt{16}$
 - $\sqrt{64}$
 - $\sqrt{8}$
 - $\sqrt{\frac{1}{64}}$
- The number 0.8 belongs to which of these sets? Natural number, whole numbers, integers, rational numbers, irrational numbers, and real numbers. Name all that apply.
- Given the following set of numbers, name the irrational numbers.
$$23, \quad \sqrt{3}, \quad 2.35, \quad 0, \quad -6.555, \quad \frac{4}{9}, \quad -2$$
- State whether $\sqrt{168}$ is a rational number or an irrational number.
- Classify $\sqrt{9}$ as rational or irrational.
- Let \mathbb{N} be the set of natural numbers, \mathbb{Z} the set of integers, \mathbb{Q} the set of rational numbers, and \mathbb{R} the set of real numbers. Indicate to which sets each of the following belong:
 - -70
 - $0.333\dots$
 - 22
 - 2.7182

9. The formula $s = \sqrt{15d}$ relates the length of a skid mark d with the speed the car was traveling, s . If you solved the equation, what type of number would s be if $0 < d < 15$? If $d = 15$?
10. Classify $-\sqrt{25}$ as rational or irrational.

KEYS

1. [B]
 2. [B]
 3. [C]
 4. Rational numbers, real numbers.
 5. $\sqrt{3}$
 6. Irrational
 7. Rational
 8. a. $\mathbb{Z}, \mathbb{Q}, \mathbb{R}$
b. \mathbb{Q}, \mathbb{R}
c. $\mathbb{N}, \mathbb{Z}, \mathbb{Q}, \mathbb{R}$
d. \mathbb{Q}, \mathbb{R}
 9. real, irrational; real, rational, whole
 10. rational
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