

1. Which of the following numbers is irrational?

a. 0.25

c. $\frac{1}{3}$

b. $\sqrt{9}$

d. -5

2. What type of number is 5.75?

a. Rational

c. Integer

b. Irrational

d. Whole

3. Which of the following is not a rational number?

a. 0.6

c. $\sqrt{16}$

b. -2

d. $\frac{3}{4}$

4. If x is an irrational number, what can be said about 2x?

a. It is rational

c. It depends on the value of x

b. It is irrational

d. It is always negative

5. The square root of which number is irrational?

a. 25

c. 81

b. 49

d. 121

6. What is the sum of a rational number and an irrational number?

a. Always rational

c. Sometimes rational, sometimes irrational

b. Always irrational

d. Can't be determined

7. Which of the following is an irrational number between 3 and 4?

a. 3.5

c. 3.75

b. $\sqrt{10}$

d. -3

8. If a number can be expressed as a fraction of two integers, it is:

a. Always irrational

c. Always rational

b. Always a whole number

d. Always prime

9. If p is a prime number, what can we say about \sqrt{p} ?

a. Always rational

c. Sometimes rational, sometimes irrational

b. Always irrational

d. Depends on the specific value of p