CBSEASSISTANCE.COM

NUMBER SYSTEM

ASSIGNMENT 1

1. When $12\sqrt{15}$ is divided by $4\sqrt{3}$, the quotient is:

a. $3\sqrt{5}$ b. $5\sqrt{3}$ c. $3\sqrt{3}$ d. $5\sqrt{5}$

2. Between $\frac{1}{7}$ and $\frac{1}{8}$ we can insert:

a. No irrational number b. infinitely many rational numbers

c. Infinitely many integers d. only one rational number

3. Which of the following numbers is an irrational number?

a. $2.\overline{3}$ b. $\sqrt{0.09}$ c. $\sqrt{5}$ d. $\frac{3}{7}$

4. $\left(\frac{81}{625}\right)^{\frac{1}{4}}$ is equal to:

a. $\frac{3}{5}$ b. $\frac{9}{25}$ c. $\frac{25}{9}$ d. $\frac{5}{3}$

5. Express $0.\overline{57}$ in the form of $\frac{p}{q}$, where p and q are integers and $q \neq 0$.

6. If $\frac{\sqrt{3}-1}{\sqrt{3}+1} = a - b\sqrt{3}$, then find the value of a and b.

7. Express $0.\overline{103}$ in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$.

8. If $\frac{3+\sqrt{2}}{3-\sqrt{2}} = a + b\sqrt{2}$, then find the values of a and b.

9. Express $0.\overline{57}$ in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$.

10. Locate $\sqrt{5}$ on the number line.