

Exercise 1C

Question 5:

(i)
$$4 + \sqrt{5}$$

Since 4 is a rational number and $\sqrt{5}$ is an irrational number.

So, $4+\sqrt{5}$ is irrational because sum of a rational number and irrational number is always an irrational number.

(ii)
$$(-3 + \sqrt{6})$$

Since – 3 is a rational number and $\sqrt{6}$ is irrational.

So, $(-3+\sqrt{6})$ is irrational because sum of a rational number and irrational number is always an irrational number.

Since 5 is a rational number and $\sqrt{7}$ is an irrational number.

So, $5\sqrt{7}$ is irrational because product of a rational number and an irrational number is always irrational.

(iv)
$$-3\sqrt{8}$$

Since -3 is a rational number and $\sqrt{8}$ is an irrational number.

So, $-3\sqrt{8}$ is irrational because product of a rational number and an irrational number is always irrational.

 $\frac{2}{\sqrt{5}}$ is irrational because it is the product of a rational number and the irrational

 $\frac{4}{\sqrt{3}}$ is an irrational number because it is the product of rational number and irrational number $\sqrt{3}$.

Question 6:

- (i) True
- (ii) False
- (iii) True
- (iv) False
- (v) True
- (vi) False (vii) False
- (viii) True
- (ix) True