

WORKSHEET ON REAL NUMBERS

1. If the HCF of 408 and 1032 is expressible in the form $1032 \times 2 + 408 \times p$, then the value of p is
(a) 5
(b) -5
(c) 4
(d) -4
2. HCF of 8, 9, 25 is
(a) 8
(b) 9
(c) 25
(d) 1
3. Which of the following is not irrational?
(a) $(2 - \sqrt{3})2$
(b) $(\sqrt{2} + \sqrt{3})2$
(c) $(\sqrt{2} - \sqrt{3})(\sqrt{2} + \sqrt{3})$
(d) $27\sqrt{7}$
4. The product of a rational and irrational number is
(a) rational
(b) irrational
(c) both of above
(d) none of above
5. If $b = 3$, then any integer can be expressed as $a =$
(a) $3q, 3q+1, 3q+2$
(b) $3q$
(c) none of the above
(d) $3q+1$
6. The largest number that will divide 398,436 and 542 leaving remainders 7,11 and 15 respectively is
(a) 17
(b) 11
(c) 34
(d) 45
7. There is a circular path around a sports field. Priya takes 18 minutes to drive one round of the field. Harish takes 12 minutes. Suppose they both start at the same point and at the same time and go in the same direction. After how many minutes will they meet ?
(a) 36 minutes

- (b) 18 minutes
- (c) 6 minutes
- (d) They will not meet

8. Express 98 as a product of its primes

- (a) $2^2 \times 7$
- (b) $2^2 \times 7^2$
- (c) 2×7^2
- (d) $2^3 \times 7$

9. Three farmers have 490 kg, 588 kg and 882 kg of wheat respectively. Find the maximum capacity of a bag so that the wheat can be packed in exact number of bags.

- (a) 98 kg
- (b) 290 kg
- (c) 200 kg
- (d) 350 kg

10. The least number that is divisible by all the numbers from 1 to 5 (both inclusive) is

- (a) 5
- (b) 60
- (c) 20
- (d) 100