EduSahara™ Assignment

Name : Remainder Theorem

Chapter : Polynomials

Grade : CBSE Grade IX

1. The remainder when $4j$ is divided by 6 is

   (i) (-1) (ii) 2 (iii) 1 (iv) (-2) (v) 0

2. The remainder when $7t^2$ is divided by $(t+8)$ is

   (i) 447 (ii) 445 (iii) 449 (iv) 451 (v) 448

3. The remainder when $(3u+6)$ is divided by $(u-7)$ is

   (i) 25 (ii) 28 (iii) 29 (iv) 27 (v) 26

4. The remainder when (n^2-5n) is divided by $(n+4)$ is

   (i) 35 (ii) 36 (iii) 39 (iv) 34 (v) 37

5. The remainder when $(-2p^2+3p-5)$ is divided by $(p+7)$ is

   (i) (-124) (ii) (-123) (iii) (-122) (iv) (-127) (v) (-125)

6. The remainder when $(3j^4-2j^3-8j^2-7j-5)$ is divided by (j^2-4) is

   (i) $(-12j+11)$ (ii) $(-16j+11)$ (iii) $(-17j+11)$ (iv) $(-14j+11)$ (v) $(-15j+11)$

7. If 1 and -1 are the zeros of the polynomial $f(x)=16x^4-48x^3+ax^2+bx-32$, find the value of a and b

   (i) $16, 49$ (ii) $47, 15$ (iii) $49, 17$ (iv) $17, 48$ (v) $16, 48$

8. If the polynomials $-6x^2+ax+24$ and $ax^2+5x-12$ leave the same remainder when divided by $(x-2)$, find the value of a

   (i) 1 (ii) 0 (iii) (-1) (iv) 3 (v) 2

9. Which of the following are true ?

   a) If p(x) is divided by (x - a), the remainder is p(a)
   b) If p(a) = 0, then (x + a) perfectly divides p(x)
   c) Division of a polynomial with another polynomial stops when the degree of the remainder equals the degree of the divisor
   d) If the degree of p(x) is less then the degree of d(x), we should not divide p(x) with d(x)

   (i) {b,d,a} (ii) {b,a} (iii) {c,d} (iv) {b,c,a} (v) {a,d}

10. Find the remainder when $(6x^2+12x-18)$ is divided by $(3x+3)$

    (i) -26 (ii) -22 (iii) -24 (iv) -23 (v) -25

Assignment Key

1) (v)	2) (v)	3) (iv)	4) (ii)	5) (i)	6) (v)
7) (v)	8) (i)	9) (v)	10) (iii)		