

## Solutions – Remainder Theorem (A)

Find the remainder when  $-2x^3 - 4x^2$  is divided by  $(x + 2)$ .

0

Find the remainder when  $-2x^3 - 2x^2 + 2x - 9$  is divided by  $(x - 5)$ .

-299

Find the remainder when  $-x^3 - 5x^2 + x - 3$  is divided by  $(x + 2)$ .

-17

Find the remainder when  $-2x^3 + x^2 + 2x + 10$  is divided by  $(x - 5)$ .

-205

Find the remainder when  $-x^3 - 4x^2 - 5x$  is divided by  $(x + 3)$ .

6

Find the remainder when  $x^3 + 4x + 7$  is divided by  $(x + 2)$ .

-9

## Solutions – Remainder Theorem (B)

Find the remainder when  $-2x^3 - 4x^2 + 2x$  is divided by  $(x - 3)$ .

**-84**

Find the remainder when  $-2x^3 - 3x + 9$  is divided by  $(x - 3)$ .

**-54**

Find the remainder when  $-2x^3 + 2x^2 - 7$  is divided by  $(x + 3)$ .

**65**

Find the remainder when  $x^3 - 3x^2 - 2x + 8$  is divided by  $(x + 1)$ .

**6**

Find the remainder when  $x^3 + x^2 - 3x$  is divided by  $(x + 1)$ .

**3**

Find the remainder when  $-x^3 - 4x^2 + 2x + 9$  is divided by  $(x - 5)$ .

**-206**

## Solutions – Remainder Theorem (C)

Find the remainder when  $-x^3 - 3x^2 - x + 2$  is divided by  $(x - 4)$ .

**-114**

Find the remainder when  $2x^3 + 4x^2 - 5x + 9$  is divided by  $(x + 2)$ .

**19**

Find the remainder when  $x^3 + 3x^2 + 2x + 4$  is divided by  $(x - 4)$ .

**124**

Find the remainder when  $-2x^3 + 4x^2 + 7$  is divided by  $(x - 1)$ .

**9**

Find the remainder when  $-2x^3 - 4x^2 - 4x - 7$  is divided by  $x$ .

**-7**

Find the remainder when  $x^3 - 4x^2 - 3x - 5$  is divided by  $(x - 4)$ .

**-17**

## Solutions – Remainder Theorem (D)

Find the remainder when  $-2x^3 - x^2 - 7$  is divided by  $(x + 1)$ .

**-6**

Find the remainder when  $-x^3 - 3x^2 + 4x + 2$  is divided by  $(x - 2)$ .

**-10**

Find the remainder when  $x^3 + 4x^2 + x - 7$  is divided by  $(x - 2)$ .

**19**

Find the remainder when  $-x^3 + 3x^2 - x + 8$  is divided by  $(x + 1)$ .

**13**

Find the remainder when  $x^3 - 3x^2 + 5x$  is divided by  $(x - 1)$ .

**3**

Find the remainder when  $-x^3 - 5x^2 - x + 1$  is divided by  $x$ .

**1**

## Solutions – Remainder Theorem (E)

Find the remainder when  $x^3 + x^2 - 3x + 8$  is divided by  $(x + 5)$ .

**-77**

Find the remainder when  $-2x^3 - 2x^2 - 4x - 6$  is divided by  $(x - 1)$ .

**-14**

Find the remainder when  $-2x^3 + 4x^2 + x + 1$  is divided by  $(x - 3)$ .

**-14**

Find the remainder when  $-2x^3 + 3x + 7$  is divided by  $(x + 5)$ .

**242**

Find the remainder when  $2x^3 - x^2 + 3x - 1$  is divided by  $(x + 4)$ .

**-157**

Find the remainder when  $-x^3 + 4x^2 + 5x + 6$  is divided by  $(x - 5)$ .

**6**

## Solutions – Remainder Theorem (F)

Find the remainder when  $x^3 - 5x^2 + 3x + 1$  is divided by  $(x + 5)$ .

**-264**

Find the remainder when  $-2x^3 - 5x^2 - 5$  is divided by  $(x + 5)$ .

**120**

Find the remainder when  $2x^3 - x + 10$  is divided by  $x$ .

**10**

Find the remainder when  $x^3 - x + 3$  is divided by  $(x - 4)$ .

**63**

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

**12**

Find the remainder when  $x^3 - 4x^2 - 5x + 3$  is divided by  $(x - 2)$ .

**-15**

## Solutions – Remainder Theorem (G)

Find the remainder when  $-2x^3 - 3x^2 + 4x - 2$  is divided by  $(x - 2)$ .

**–22**

Find the remainder when  $-2x^3 - 4x^2 - 3x + 1$  is divided by  $(x + 3)$ .

**28**

Find the remainder when  $-2x^3 + x^2 - 4x - 2$  is divided by  $(x + 2)$ .

**26**

Find the remainder when  $x^3 + 3x^2 + 7$  is divided by  $(x + 5)$ .

**–43**

Find the remainder when  $2x^3 + 2x^2 + 5x - 1$  is divided by  $(x - 4)$ .

**179**

Find the remainder when  $-x^3 + x^2 + 2x + 1$  is divided by  $(x + 5)$ .

**141**

## Solutions – Remainder Theorem (H)

Find the remainder when  $-2x^3 + 4x^2 - 4x - 9$  is divided by  $(x + 1)$ .

1

Find the remainder when  $x^3 + 3x^2 + 4$  is divided by  $(x + 2)$ .

8

Find the remainder when  $x^3 - 3x^2$  is divided by  $(x - 2)$ .

-4

Find the remainder when  $2x^3 + x^2 + 2$  is divided by  $(x + 2)$ .

-10

Find the remainder when  $x^3 + 3x^2 + x - 8$  is divided by  $(x + 2)$ .

-6

Find the remainder when  $x^3 - 5x^2 - 3x - 6$  is divided by  $(x + 1)$ .

-9

## Solutions – Remainder Theorem (I)

Find the remainder when  $2x^3 - 4x^2 + x - 6$  is divided by  $(x - 1)$ .

**-7**

Find the remainder when  $-2x^3 - 4x^2 + 10$  is divided by  $(x + 5)$ .

**160**

Find the remainder when  $x^3 - 3x^2 + 3x + 5$  is divided by  $(x - 2)$ .

**7**

Find the remainder when  $-x^3 + x^2 + 2x + 7$  is divided by  $x$ .

**7**

Find the remainder when  $2x^3 - 2x^2 + 3x - 3$  is divided by  $(x - 1)$ .

**0**

Find the remainder when  $2x^3 + 5x^2 + 2x - 6$  is divided by  $x$ .

**-6**

## Solutions – Remainder Theorem (J)

Find the remainder when  $2x^3 - x^2 - 2x + 2$  is divided by  $(x - 4)$ .

**106**

Find the remainder when  $2x^3 + x^2 + x - 7$  is divided by  $(x + 2)$ .

**-21**

Find the remainder when  $-2x^3 + 4x^2 - 4x - 2$  is divided by  $(x - 1)$ .

**-4**

Find the remainder when  $-x^3 - 4x^2 + 5x - 3$  is divided by  $(x + 4)$ .

**-23**

Find the remainder when  $-2x^3 + 3x - 10$  is divided by  $x$ .

**-10**

Find the remainder when  $-x^3 - x^2 + 4x - 5$  is divided by  $(x - 5)$ .

**-135**