



1. The quotient when  $3r^2$  is divided by  $(r-6)$  is

- (i)  $(2r+18)$  (ii)  $(r+18)$  (iii)  $(5r+18)$  (iv)  $(4r+18)$  (v)  $(3r+18)$

2. The quotient when  $(-4m+8)$  is divided by  $(m+4)$  is

- (i)  $(-4)$  (ii)  $(-5)$  (iii)  $(-3)$  (iv)  $(-6)$  (v)  $(-1)$

3. The quotient when  $(6b^2+2b+6)$  is divided by  $(b-5)$  is

- (i)  $(7b+32)$  (ii)  $(8b+32)$  (iii)  $(4b+32)$  (iv)  $(6b+32)$  (v)  $(5b+32)$

4. The quotient when  $(5r^2+4r)$  is divided by  $(r+3)$  is

- (i)  $(7r-11)$  (ii)  $(4r-11)$  (iii)  $(5r-11)$  (iv)  $(2r-11)$  (v)  $(6r-11)$

5. The quotient when  $(-8i^5+8i^4+2i^3+9i^2-7i+7)$  is divided by  $(i-8)$  is

- (i)  $(-11i^4-56i^3-446i^2-3559i-28479)$  (ii)  $(-9i^4-56i^3-446i^2-3559i-28479)$   
(iii)  $(-8i^4-56i^3-446i^2-3559i-28479)$  (iv)  $(-7i^4-56i^3-446i^2-3559i-28479)$   
(v)  $(-5i^4-56i^3-446i^2-3559i-28479)$

6. The remainder when  $8i$  is divided by  $(-5)$  is

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

7. The remainder when  $2s^2$  is divided by  $(s-5)$  is

- (i)  $52$  (ii)  $49$  (iii)  $50$  (iv)  $47$  (v)  $51$

8. The remainder when  $(3k+3)$  is divided by  $(k-5)$  is

- (i)  $20$  (ii)  $19$  (iii)  $18$  (iv)  $16$  (v)  $17$

9. The remainder when  $(3y^2-8y)$  is divided by  $(y-7)$  is

- (i)  $90$  (ii)  $93$  (iii)  $88$  (iv)  $91$  (v)  $92$

10. The remainder when  $(-4q^2+7q+7)$  is divided by  $(q+2)$  is

- (i)  $(-20)$  (ii)  $(-24)$  (iii)  $(-23)$  (iv)  $(-22)$  (v)  $(-26)$

11. Find the remainder when  $(3x^2+22x+7)$  is divided by  $(3x-1)$

- (i)  $\frac{72}{5}$  (ii)  $14$  (iii)  $\frac{44}{3}$  (iv)  $16$  (v)  $\frac{46}{3}$

12. If  $f(x) = (12x^3 - 8x^2 - 47x - 20)$  and  $g(x) = (6x^3 - 7x^2 - 11x + 12)$  have a common factor, find the common factor  
(i)  $(x-1)$  (ii)  $(2x+1)$  (iii)  $(3x+4)$  (iv)  $(2x-3)$  (v)  $(2x-5)$

13. If the polynomial  $9x^2 + ax + b$  is divided by  $(2x-4)$ , it leaves a remainder 70. If it is divided by  $(x+5)$ , it leaves a remainder 154. Find the value of  $a$  and  $b$   
(i) 5, 16 (ii) 15, 4 (iii) 3, 14 (iv) 16, 4 (v) 15, 5

## Assignment Key

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1) (v)

2) (i)

3) (iv)

4) (iii)

5) (iii)

6) (iii)

7) (iii)

8) (iii)

9) (iv)

10) (iii)

11) (iii)

12) (iii)

13) (ii)