1. If $\left(x+\frac{1}{x}\right)=6$, find the value of $\left(x^2+\frac{1}{x^2}\right)$

(i) 37 (ii) 32 (iii) 34 (iv) 35 (v) 33

2. If $\left(x+\frac{1}{x}\right)=8$, find the value of $\left(x^4+\frac{1}{x^4}\right)$

(i) 3843 (ii) 3841 (iii) 3839 (iv) 3842 (v) 3845

3. If $\left(x-\frac{1}{x}\right)=5$, find the value of $\left(x^2+\frac{1}{x^2}\right)$

(i) 26 (ii) 25 (iii) 27 (iv) 30 (v) 28

4. If $\left(x-\frac{1}{x}\right)=8$, find the value of $\left(x^4+\frac{1}{x^4}\right)$

(i) 4353 (ii) 4355 (iii) 4351 (iv) 4354 (v) 4356

5. If $\left(x^2+\frac{1}{x^2}\right)=23$, find the value of $\left(x+\frac{1}{x}\right)$

(i) 7 (ii) 4 (iii) 6 (iv) 2 (v) 5

6. If $\left(x^4+\frac{1}{x^4}\right)=3842$, find the value of $\left(x+\frac{1}{x}\right)$

(i) 9 (ii) 8 (iii) 10 (iv) 7 (v) 6

7. If $\left(x^2+\frac{1}{x^2}\right)=11$, find the value of $\left(x-\frac{1}{x}\right)$

(i) 1 (ii) 3 (iii) 4 (iv) 2 (v) 6

8. If $\left(x^4+\frac{1}{x^4}\right)=727$, find the value of $\left(x-\frac{1}{x}\right)$

(i) 8 (ii) 3 (iii) 4 (iv) 6 (v) 5

9. If $\left(x-\frac{1}{x}\right)=3$, find the value of $\left(x^3-\frac{1}{x^3}\right)$

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

10. If $\left(x+\frac{1}{x}\right)=6$, find the value of $\left(x^3+\frac{1}{x^3}\right)$

(i) 199 (ii) 197 (iii) 198 (iv) 200 (v) 196

11. If $\left(3x+\frac{1}{2x}\right)=4$, find the value of $\left(9x^2+\frac{1}{4x^2}\right)$

(i) 16 (ii) 14 (iii) 12 (iv) 13 (v) 11

12. If $\left(4x-\frac{1}{3x}\right)=4$, find the value of $\left(16x^2+\frac{1}{9x^2}\right)$

(i) 20 (ii) 18 (iii) $\frac{58}{3}$ (iv) $\frac{92}{5}$ (v) $\frac{56}{3}$

13. If $\left(4x-\frac{1}{3x}\right)=2$, find the value of $\left(64x^3-\frac{1}{27x^3}\right)$

(i) 19 (ii) 15 (iii) 17 (iv) 14 (v) 16

14. If $(a+b)=11$, $ab=30$, find (a^2+b^2)

(i) 60 (ii) 62 (iii) 61 (iv) 58 (v) 64

15. If $(a^2+b^2)=41$, $ab=20$, find $(a+b)$

(i) 6 (ii) 8 (iii) 9 (iv) 10 (v) 11

16. If $(a-b)=2$, $ab=24$, find (a^2-b^2)

(i) 17 (ii) 19 (iii) 23 (iv) 20 (v) 21

17. If $(a^2-b^2)=11$, $ab=30$, find $(a-b)$

(i) -1 (ii) 1 (iii) 0 (iv) 4 (v) 2

18. If $(2a+7b)=33$, $ab=18$, find $(4a^2+49b^2)$

(i) 582 (ii) 585 (iii) 587 (iv) 584 (v) 586

19. If $(25a^2+9b^2)=1044$, $ab=24$, find $(5a+3b)$

(i) 41 (ii) 40 (iii) 43 (iv) 42 (v) 45

20. If $(a+b)=9$, $ab=20$, find (a^3+b^3)

(i) 188 (ii) 190 (iii) 189 (iv) 187 (v) 192

21. If $(a-b)=1$, $ab=20$, find (a^3-b^3)

(i) 60 (ii) 61 (iii) 58 (iv) 62 (v) 64

22. If $(3a+2b)=16$, $ab=8$, find $(27a^3+8b^3)$

(i) 1791 (ii) 1792 (iii) 1795 (iv) 1793 (v) 1789

23. If $(a+b)=12$, $ab=32$, find (a^4+b^4)

(i) 4354 (ii) 4349 (iii) 4351 (iv) 4353 (v) 4352

24. If $(a^4+b^4)=641$, $ab=10$, find $(a+b)$

(i) 7 (ii) 9 (iii) 4 (iv) 8 (v) 6

25. If $(a-b)=1$, $ab=6$, find (a^4-b^4)

(i) 65 (ii) 67 (iii) 63 (iv) 66 (v) 64

26. If $(3a+4b)=31$, $ab=20$, find $(81a^4+256b^4)$

(i) 116160 (ii) 116164 (iii) 116159 (iv) 116161 (v) 116162

27. If $(81a^4+256b^4)=125712$, $ab=18$, find $(3a+4b)$

(i) 30 (ii) 27 (iii) 32 (iv) 29 (v) 31

28. If $(a+b+c)=11$, $(a^2+b^2+c^2)=43$, find $(ab+ac+bc)$

(i) 41 (ii) 36 (iii) 40 (iv) 38 (v) 39

29. If $(a+b+c)=18$, $(ab+ac+bc)=107$, find $(a^2+b^2+c^2)$

(i) 113 (ii) 111 (iii) 107 (iv) 109 (v) 110

Assignment Key

1) (iii)	2) (iv)	3) (iii)	4) (iv)	5) (v)	6) (ii)
7) (ii)	8) (v)	9) (v)	10) (iii)	11) (iv)	12) (v)
13) (v)	14) (iii)	15) (iii)	16) (iv)	17) (ii)	18) (ii)
19) (iv)	20) (iii)	21) (ii)	22) (ii)	23) (v)	24) (i)
25) (i)	26) (iv)	27) (i)	28) (v)	29) (v)	