EduSahara™ Assignment

Name : Finding Values of Algebraic Expressions

Chapter : Special Products As Identities

Grade : ICSE Grade VII

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

(i) 13 (ii) 16 (iii) 15 (iv) 14 (v) 12

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

(i) 194 (ii) 191 (iii) 197 (iv) 195 (v) 193

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

(i) 52 (ii) 48 (iii) 50 (iv) 54 (v) 51

4. If $\left(x-\frac{1}{x}\right)=7$, find the value of $\left(x^4+\frac{1}{x^4}\right)$

(i) 2597 (ii) 2600 (iii) 2602 (iv) 2599 (v) 2598

5. If $\left(6x+\frac{1}{2x}\right)=7$, find the value of $\left(36x^2+\frac{1}{4x^2}\right)$

(i) 43 (ii) 44 (iii) 40 (iv) 45 (v) 42

6. If $\left(5x-\frac{1}{3x}\right)=2$, find the value of $\left(25x^2+\frac{1}{9x^2}\right)$

(i) $\frac{20}{3}$ (ii) $\frac{36}{5}$ (iii) 8 (iv) $\frac{22}{3}$

7. If $(a+b)=9$, $ab=18$, find (a^2+b^2)

(i) 47 (ii) 45 (iii) 46 (iv) 44 (v) 43

8. If $(5a+2b)=24$, $ab=8$, find $(25a^2+4b^2)$

(i) 415 (ii) 419 (iii) 416 (iv) 414 (v) 417

9. If $(a+b)=5$, $ab=6$, find (a^4+b^4)

(i) 94 (ii) 96 (iii) 98 (iv) 97 (v) 99

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

(i) 116159 (ii) 116160 (iii) 116163 (iv) 116161 (v) 116162

Assignment Key

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