

1. evaluate when $x = 1$, $y = 2$ and $z = 3$

(i) $3xy$ (ii) $2z$ (iii) $\frac{9}{yz}$

(iv) $\frac{yz}{14}$ (v) $2y+4z$ (vi) $x+3y-2z$

(vii) $yz+xz$ (viii) y^2+z^2 (ix) $2x^2+y$

(x) $2y^2-z^3$ (xi) y^2z (xii) $3y^2z^2$

2. evaluate when $p = 4$, $q = 5$ and $r = 6$

(i) $p^2+q^3-r^2+3pqr$ (ii) $(p-q+r)(2q-4r)$ (iii) $(p-r)^2+(q-p)^2$

(iv) $\frac{p}{r}-\frac{q}{p}+\frac{r}{q}$ (v) $\frac{p-1}{3}-\frac{q-r}{2}$ (vi) $\frac{r+p}{4}-\frac{p-q}{3}$

(vii) $3p^2+2q-2pq^2r$ (viii) $p^2+2q^3-2r^2$ (ix) $\frac{p+q}{r}-\frac{pq+r}{p}$

(x) $\frac{p+2q}{r-q}-\frac{p+r}{p+q}$ (xi) $\frac{3r^2+2p}{pq-r}-\frac{2q}{r}$ (xii) $\frac{p^2-q^2}{r}-\frac{p-c^3}{r+2p}$

1.

(i) 6

(ii) 6

(iii) $\frac{2}{3}$

(iv) $\frac{3}{7}$

(v) 16

(vi) 1

(vii) 9

(viii) 13

(ix) 4

(x) -19

(xi) 12

(xii) 108

2.

(i) 65

(ii) -70

(iii) 5

(iv) $\frac{37}{60}$

(v) $1\frac{1}{2}$

(vi) $\frac{17}{6}$

(vii) -1154

(viii) -198

(ix) -5

(x) $-7\frac{1}{9}$

(xi) $6\frac{13}{21}$

(xii) $-16\frac{9}{14}$