

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