

1. $6, \frac{5}{4}$ and 0 are constants. $4y, -3x, \frac{5}{5}xy, a^2, 7\phi, \frac{ax}{y}, \frac{3}{4x}$ and $-\frac{x^2}{3y}$ are variables

2. (i) $4x, -x, \frac{2}{3}x$ and $-3y, \frac{4}{5}y, y$

(ii) $\frac{2}{3}xy, -4yx, yx$ and $2yz, -\frac{2}{3}yz$ and $\frac{2y}{3}$

(iii) $-a^2b^2, 7b^2a, 2ab^2$ and $b^2a^2, -3a^2b^2$

(iv) $5ax, 7xa, \frac{2ax}{3}$ and $-5by, \frac{by}{7}$

3. (i) True

(ii) False

(iii) True

(iv) False

(v) True

(vi) False

(vii) True

(viii) True

(ix) True

(x) False

(xi) True

(xii) False

4. (i) 2

(ii) 2

(iii) 2

(iv) 2

(v) 3

(vi) 1

~~(vii)~~ (vii) 2

(viii) 3

(ix) 3

5. (i) True

(ii) False

(i) True

(ii) False

(iii) False

(iv) True

6. (i) Monomial

(ii) Binomial

(iii) Monomial

(iv) Monomial

(v) Trinomial

(vi) Binomial

(vii) Trinomial

(viii) Binomial

(ix) Trinomial

7. (i) 1

(ii) -1

(iii) -3

$$(iv) - 5a$$

$$(v) \frac{3}{2}y$$

$$(vi) \frac{a}{2}$$

$$8. (i) - 3y^2$$

$$(ii) - a$$

$$(iii) - 1$$

$$(iv) - \frac{15}{2}a$$

$$(v) - 2z$$

$$(vi) - y^2$$

$$(vii) - 3a$$

$$(viii) 5a$$

$$9. (i) 5$$

$$(ii) 1$$

$$(iii) 5$$

$$(iv) - 2$$

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

$$(vi) \frac{15}{2}$$

$$(vii) -7$$

$$(viii) -\frac{3}{2}$$

10. (i) 2

(ii) 2

(iii) 10

(iv) 20

(v) 3

(vi) 7

(vii) 6

(viii) 9