



## Binomial Theorem - Polynomial with Variable and Power to Binomial Notation

1 Find the term containing  $n^2t^3$  in the expansion of this expression.

A	B	C
$\binom{5}{3}n^2t^3$	$\binom{5}{4}n^1t^4$	$\binom{3}{5}n^2t^3$

$$(n + t)^5$$

D
$\binom{5}{3}n^3t^2$

2 Find the term containing  $t^1p^1$  in the expansion of this expression.

A	B	C
$\binom{4}{3}t^1p^3$	$\binom{4}{3}t^3p^1$	$\binom{3}{4}t^1p^3$

$$(t + p)^4$$

D
$\binom{4}{4}t^0p^4$

3 Find the term containing  $r^1x^1$  in the expansion of this expression.

A	B	C
$\binom{5}{5}r^0x^5$	$\binom{5}{4}r^4x^1$	$\binom{5}{4}r^1x^4$

$$(r + x)^5$$

D
$\binom{4}{5}r^1x^4$

4 Find the term containing  $y^2w^1$  in the expansion of this expression.

$$(y + w)^3$$

A	B	C	D
$\binom{3}{1}y^2w^1$	$\binom{3}{2}y^1w^2$	$\binom{1}{3}y^2w^1$	$\binom{3}{1}y^1w^2$

5 Find the term containing  $z^1n^2$  in the expansion of this expression.

$$(z + n)^3$$

A	B	C	D
$\binom{3}{2}z^2n^1$	$\binom{3}{3}z^0n^3$	$\binom{3}{2}z^1n^2$	$\binom{2}{3}z^1n^2$

6 Find the term containing  $t^3n^2$  in the expansion of this expression.

$$(t + n)^5$$

A	B	C
$\binom{5}{3}t^2n^3$	$\binom{5}{2}t^3n^2$	$\binom{5}{2}t^2n^3$

D
$\binom{2}{5}t^3n^2$

7 Find the term containing  $r^3y^1$  in the expansion of this expression.

$$(r + y)^4$$

A	B	C
$\binom{4}{1}r^3y^1$	$\binom{4}{2}r^2y^2$	$\binom{1}{4}r^3y^1$

D
$\binom{4}{1}r^1y^3$

8 Find the term containing  $w^2x^2$  in the expansion of this expression.

$$(w + x)^4$$

A	B	C
$\binom{2}{4}w^2x^2$	$\binom{4}{3}w^1x^3$	$\binom{4}{2}w^2x^2$