Find the coefficient of x^2 in the binomial expansion of: $6(3x+4)^5$

35

0

When $\left(1-\frac{3}{2}x\right)^n$ is expanded, the coefficient of x is -24. Find the value of n.

$\frac{567}{16}$

What are the first four terms, in ascending powers of x, for the binomial expansion of: $(1-2x)^5$

2 449 440

The coefficient of x^4 is seven times the coefficient of x in the expansion of: $(1+x)^n$ Find n.

34 560

Find the coefficient of x^3 in the binomial expansion of: $(4-3x)^6$

$x^4+8x^3+24x^2+32x+16$

Expand $(3+2x)^4$

$-32x^5+80x^4-80x^3+40x^2$

Find the coefficient of x^6 in the binomial expansion of: $\left(3+\frac{1}{2}x\right)^9$

6

The coefficient of x^3 in the expansion of: $(3+bx)^5$ is 5760. Find the value of the constant b.

20

Expand: $(1+x)^3$

$-34\,560$

16

Find the coefficient of
x
in the binomial expansion of:
$\left(x+\frac{1}{x}\right)^7$

x^3+3x^2+3x+1

4

Find the coefficient of
x^4
in the binomial expansion of:
$(3+2x)^{10}$

4

$16x^4+96x^3+216x^2+216x+81$

When $\left(1+\frac{1}{3}x\right)^n$ is expanded, the coefficient of x^2 is 4.
Find the value of n.

Expand:
$(2+x)^4$

8

Expand
$(1+\sqrt{3})^3+(1-\sqrt{3})^3$

Solve
$(1+x)^4-(1-x)^4=0$