

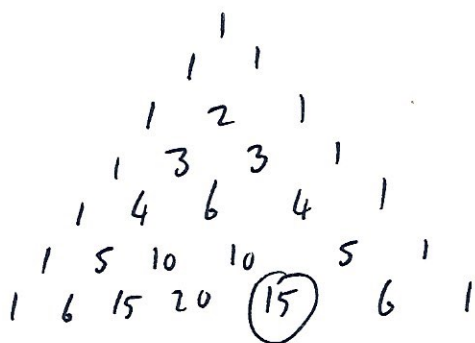


1st February

Factorise fully $7x^2 - 28$

$$7(x^2 - 4)$$

$$7(x-2)(x+2)$$

Use Pascal's Triangle to work out the coefficient of x^4 in the expansion of $(3-x)^6$ 

$$15 \times (3)^2 \times (-x)^4$$

$$135x^4$$

$$A = 3x \quad B = 4x$$

C is 75% more than A

D is 30% less than B

C is 147 greater than D

Work out the value of x

$$C = 5.25x \quad D = 2.8x$$

$$5.25x - 2.8x = 147$$

$$2.45x = 147$$

$$x = 60$$

Solve

$$x^{-\frac{2}{5}} = 2\frac{1}{4}$$

$$x^{-\frac{2}{5}} = \frac{9}{4}$$

$$x^{\frac{2}{5}} = \frac{4}{9}$$

$$x^{\frac{1}{5}} = \pm \frac{2}{3}$$

$$x = \pm \frac{32}{243}$$