

$$\sqrt{198-21^2+81981}$$

$$\sqrt{96^2+784}$$

$$\sqrt{9216+784}$$

$$\sqrt{10000}$$

$$\sqrt{100}$$

2)

$$GR(X) = M+1$$

$$T = M+1$$

$$T-1 = M$$

$$G = M$$

$$GA = M+1$$

$$GA = G+1$$

$$GA = 13$$

$$GA = 25$$

$$4M-3=15$$

$$4M = 18+3$$

$$4M = 21$$

$$M = 5$$

4)

$$GR(Y) = 9$$

$$M+2 = 9$$

$$M = 9-2$$

$$M = 7$$

$$GA = 6$$

$$M = 6$$

$$\text{constant margin} = 11M = 11(6) = 66$$

$$GR(X) = a-8 \quad GA = 9+7$$

$$S = a-8 \quad GA = 13+7$$

$$S+8 = a \quad GA = 20$$

$$13 = a$$

6)

$$\sqrt{P(1)} = 4(1) + 1 = 4+1 = 5$$

$$P(2) = 4(2) + 1 = 8+1 = 9$$

$$P(3) = 4(3) + 1 = 12+1 = 13$$

$$P(0) = 4(0) + 1 = 0+1 = 1$$

$$\frac{5+9}{13+1}$$

$$\frac{14}{14}$$

$$1$$

7

7)  $\begin{matrix} 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{matrix}$  16)

$$GR(V) = 24 \quad GR(X) = 18m$$

$$12m = 24 \quad GR(X) = 18(2)$$

$$m = \frac{24}{12} \quad GR(X) = 36$$

$$m = 2$$

11)

$$P(x) = 3ax^{9+5} + 5ax^9 + 6 + 2ax^{9+8}$$

$$6 + 4 = 10$$

$$9 + 8 = 17$$

$$a = 17 - 8$$

$$a = 9$$

12)

$$P(x) = 3x^{10} - 27x^{80} + 3x^2 - 4x$$

$$3(3)^{10} - 3^3(3)^{80} + 3(3)^2 - 4(3)$$

$$8^{11} - 8^{81} + 27 - 12$$

$$15$$

13)

$$GR(X) = M + 4$$

$$10 = M + 4$$

$$6 = M$$

$$M + 2M + 4 = 16$$

$$2M = 12 - 4$$

$$\frac{8}{2}$$

$$4$$

14)

$$F(3) = 1 = 2 \times 3 + 3 \quad 3 \times 3 - 1 = 2$$

$$(2) = 2 + 3$$

$$3 \times 3 = 2 + 4$$

$$x = 3$$

$$x = 1$$

15) ~~18/2~~

$$6 \times 4 = 5$$

$$6m = 5$$

coefficient = 30  $\forall$  binomial coefficients

8)

$$P(x) = 2x + 3$$

$$P(2) = 2(2) + 3$$

$$P(2) = 4 + 3$$

$$P(2) = 7$$

$$P(1) = 2(1) - 3$$

$$P(1) = 2 - 3$$

$$P(1) = -1$$

9)

$$P(x+1) = x^2 \quad 2 = x+1$$

$$P(2) = 1^2 \quad 2 - 1 = x$$

$$P(x+1) = x^2 \quad 1 = x+1$$

$$P(1) = 0^2 \quad 1 - 1 = x$$

$$P(1) = 0 \quad 0 = x$$

$$P(x+1) = x^2 \quad 0 = x+1$$

$$P(0) = (-1)^2 \quad 0 - 1 = x$$

$$P(0) = 1 \quad -1 = x$$

161

$$GR(x) + G(Y) = 43$$

$$5m + 2m + 8 = 43$$

$$21 + 2m = 35$$

$$m = \frac{14}{2}$$

$$m = 7$$

$$GA = 40$$

171

$$A(x) = x + 1$$

$$A(5) = 5 + 1$$

$$A(5) = 6$$

181

$$2m + 1 = 7$$

$$2m = 7 - 1$$

$$m = 3$$

$$GR(x) = 7$$

$$m + 1 = 7$$

$$m = 6$$

$$G + G = 12$$

191

$$m + m + 4 = 20$$

$$m = 19 - 4$$

x

$$9(16) = 90$$

20

$$m + m + 4 = 20$$

$$m = 16 - 4$$

$$m = 8$$

$$m = 7 + 1$$

m

$$2(8) + 3(8)$$

$$16 + 24$$

$$= 40$$

$$GR(y) = 8$$

$$m - 2 = 8$$

$$m = 10$$