

# إختبارى التكامل المعكود

$$\textcircled{1} \int \frac{1}{x} = \ln|x| + C, \int \frac{1}{x^2} = -\frac{1}{x} + C$$

نقله الأولى

$$\int \frac{1}{x^2} + \int \frac{1}{x} = \int \frac{1}{x} + \int \frac{1}{x^2}$$

$$A = \frac{1}{3} = \frac{1}{3} + \frac{1}{3}$$

تغير الإشارة

$$\int \frac{1}{x} - \int \frac{1}{x^2} = \int \frac{1}{x} + \int \frac{1}{x^2}$$

$$12 = (7) - 7$$

إذا قلبنا المعكود التكامل تغير الإشارة فقط

$$\textcircled{2} \int \frac{1}{x^3} = -\frac{1}{2x^2} + C, \int \frac{1}{x^2} = -\frac{1}{x} + C$$

$$\textcircled{4} \int \frac{1}{x^4} = -\frac{1}{3x^3} + C, \int \frac{1}{x^2} = -\frac{1}{x} + C$$

$$\textcircled{5} \int \frac{1}{x^2} = -\frac{1}{x} + C$$

$$7 = (2 - 5) \rightarrow 7 = 2 + 5$$

$$2 = 5$$

$$\textcircled{7} \quad \begin{aligned} & \text{د(س)} = \text{س} + \text{س} \\ & \therefore \text{د(س)} \text{ دالة مقابلته } \text{د(س)} \\ & \therefore \text{د(س)} = \text{س} \end{aligned}$$

$$\sum_{i=1}^3 \text{س} \cdot \text{د(س)} = \sum_{i=1}^3 \text{س} \cdot \text{س}$$

$$\sum_{i=1}^3 \text{س} + \text{س} = \sum_{i=1}^3 \text{د(س)}$$

$$(1 + 1) - (3 + 3)$$

$$12 = 12$$

$$\textcircled{8} \quad \sum_{i=1}^2 \text{س} \cdot \text{د(س)} = \text{س} + \text{س}$$

$$\sum_{i=1}^2 \text{س} \cdot 1 + \sum_{i=1}^2 \text{س} \cdot 3 = \sum_{i=1}^2 \text{س} \cdot 1 + \sum_{i=1}^2 \text{س} \cdot 3$$

$$(1 + 3) + 3 \times 3$$

$$12 = 3 + 9$$

$$\textcircled{9} \quad \sum_{i=3}^0 \text{د(س)} = \text{س}$$

$$\text{د(س)} = 0$$

$$\text{د(3)} - \text{د(0)} = 9$$

$$\text{د(3)} - \text{د(0)} = 9$$

$$\therefore \text{د(0)} = 9 + 3 = 12$$

حرفين مربعين  $\rightarrow s = (1 - \sqrt{1}) (1 + \sqrt{1})^2$  (9)

$\rightarrow s \cdot (1 - \sqrt{1})^2$   
 $(\frac{1}{2} - \frac{1}{2}) - (0 - \frac{1}{2}) = 0 \mid \frac{1}{2} - \frac{1}{2}$

$\rightarrow s \cdot (1) \int_0^1 + \rightarrow s \cdot (1) \int_1^2 = \rightarrow s \cdot (1) \int_0^2$  (10)

$\rightarrow s \cdot (1) \int_0^1 = \rightarrow s \cdot (1) \int_0^2$

$0 = 1 \mid 1 = 1 \therefore$

$\rightarrow s \cdot \int_{\frac{1}{2}}^{\frac{3}{2}} (1 + s) \int_{\frac{1}{2}}^{\frac{3}{2}}$  (11)

$\int_{\frac{1}{2}}^{\frac{3}{2}} (1 + s) \int_{\frac{1}{2}}^{\frac{3}{2}}$

$0 - = \frac{3}{2} 0 - \frac{1}{2} = (1 - - 1) - 10 \times 1$

$$v_s \cdot (r - w) \cdot \frac{1 - P^r}{1 + P} = v_s \cdot \frac{r}{r} \cdot \frac{1 - P^r}{1 + P} \quad (13)$$

$$v_s \cdot (r - w) \cdot \frac{1 - P^r}{1 + P} = v_s \cdot (r - w) \cdot \frac{1 - P^r}{1 + P}$$

$$1 - P^r = r + 0 \quad \therefore$$

$$1 - P^r = r$$

$$P^r = 1 - r$$

$$P = 1 - r$$

$$v_s \cdot \frac{r}{1} = v_s \cdot (r + w) \cdot \frac{1 - P^r}{1 + P} \quad (14)$$

$$\frac{r}{1} = (r + w) \cdot \frac{1 - P^r}{1 + P}$$

$$r - \varepsilon = 1 \quad \therefore$$

$$r - \varepsilon = 1 - \varepsilon = 1$$

$$1 + \frac{r}{1} = v_s \cdot (r + w) \cdot \frac{1 - P^r}{1 + P} \quad (15)$$

$$(1 + r) = (1 + w)$$

$$r = w - 1$$

$$7 = 2 \times 3 = 2^1 \times 3^1 \quad (16)$$

$$7 = 2 \times 3^0 = 2^1 \times 3^0$$

$$7 = 3^2 \times (3-0) = 3^2 \times 3^0 \quad (17)$$

$$7 = 3 \times 1 \times 2 = 3^1 \times 2^1 \times 3^0$$

$$(7)_2 = 3^1 \times 2^1 + 3^0 \times 2^0 \quad (18)$$

$$(7)_2 = 7 = 7 + 0$$

$$(7)_3 = 3^1 \times 2^1 = 6$$

$$7 = 3^1 \times 2^1 = 3^1 \times 2^1 \quad (19)$$

$$7 = 3^1 \times 2^1 = 3^1 \times 2^1$$

$$v = \rho r \quad \text{---} \quad (19)$$

$$v s. (s + v) \int_0^{\rho} = (v) \int_0^{\rho}$$

$$v - \rho r = r - \rho$$

$$\rho - \rho r = r - v$$

$$\rho = 0$$

$$\int_0^{\rho} (s) = v s. (s) \int_0^{\rho} + v s. (s) \int_0^{\rho} \quad (20)$$

$$\Sigma = \int_0^{\rho} \Sigma + \Lambda$$

$$r = \Sigma \times \frac{1}{r} = v s. (s) \int_0^{\rho} \frac{1}{r}$$

$$v s. (s) \int_0^{\rho} = v s. (s) \int_0^{\rho} + (s) \int_0^{\rho} \quad (21)$$

$$v s. (s) \int_0^{\rho} + v s. (s) \int_0^{\rho} + v s. (s) \int_0^{\rho}$$

$$v s. (s) \int_0^{\rho} = v s. (s) \int_0^{\rho} + v s. (s) \int_0^{\rho}$$

$$v s. (s) \int_0^{\rho} + v s. (s) \int_0^{\rho} \quad (22)$$

$$0 = \Lambda + \mu - = v s. (s) \int_0^{\rho}$$

$$\sqrt[3]{(9+5x^2)^2} \quad (64)$$

$$\sqrt[3]{(9+5x^2)^2} \cdot \frac{1}{3} \times \frac{1}{3}$$

$$\sqrt[3]{(9+5x^2)^2} - \sqrt[3]{(9+5x^2)^2} = \sqrt[3]{(9+5x^2)^2}$$

$$3 = 7 - 1 = 3 \times 2 - 0 \times 2 =$$

$$\frac{3}{3} 7 = \frac{3}{3} \cdot (u) \frac{2}{3} \quad 6 \quad 3 \times 9 = \frac{3}{3} \cdot (u) \frac{1}{3} \quad (65)$$

$$17 = \frac{3}{3} \cdot (u) \frac{2}{3} \quad 18 = \frac{3}{3} \cdot (u) \frac{1}{3}$$

$$(u) \frac{2}{3} + (u) \frac{1}{3} = (u) \frac{1}{3}$$

$$7 = 17 + 18$$

$$(0+0+u) \frac{1}{3} = \frac{3}{3} \cdot (u) \frac{2}{3} \quad (66)$$

$$0+1- = 3 \quad \text{أو} \quad 3+1 = 0 \therefore$$

$$0 = 2 \quad \text{أو} \quad 0 = 2$$

المعطى  $\sqrt[3]{(9+5x^2)^2}$

$$\frac{3}{3} \cdot (2+3-u) \frac{1}{3} \quad (67)$$

$$3 = 1 - x \frac{1}{3} = \frac{3}{3} \cdot (u) \frac{1}{3}$$

توكيد ونظير الـ 3

$$\frac{9}{x} = \frac{1}{x} \cdot (x) \int_0^x \frac{1}{x} = \frac{1}{x} \cdot (x) \int_0^x \frac{1}{x} \quad (27)$$

$$\int_0^x \frac{1}{x} = \int_0^x \frac{1}{x} + \int_0^x \frac{1}{x}$$

$$2 = 1 + 1$$

$$2 = 1 + 1 = \frac{1}{x} \cdot (x) \int_0^x \frac{1}{x} \quad (28)$$

يفرض أن  $x = 1$   $\therefore \int_0^1 \frac{1}{x} = 1$

$$2 = 1 + 1$$

$$1 = 1 + 0$$

$$1 = 1$$

$$1 = 1$$

$$\int_0^x \frac{1}{x} = \frac{1}{x} \cdot (x) \int_0^x \frac{1}{x} \quad (29)$$

$$13 = 3 + 10 \quad \therefore \int_0^x \frac{1}{x} = \int_0^x \frac{1}{x} + \int_0^x \frac{1}{x}$$

$$\int_0^x \frac{1}{x} = \int_0^x \frac{1}{x} + \int_0^x \frac{1}{x} \quad (30)$$

$$\int_0^x \frac{1}{x} = \int_0^x \frac{1}{x} + \int_0^x \frac{1}{x}$$



$$\sum_{i=0}^p (n-i) \binom{p}{i} + n \sum_{i=0}^p \binom{p}{i} \quad (33)$$

$$\sum = n - 1 + \sum = \sum - n + \sum$$

د	ن
$(n) \binom{p}{i}$	$\binom{p}{i}$
$(n) \binom{p}{i}$	$\binom{p}{i}$

$$\sum_{i=0}^p (n-i) \binom{p}{i} + n \sum_{i=0}^p \binom{p}{i} \quad (34)$$

~~$\sum_{i=0}^p (n-i) \binom{p}{i} + n \sum_{i=0}^p \binom{p}{i}$~~  نستعمل القانون لأنه  
 ~~$(n) \binom{p}{i}$~~  لا يمكن كتابتها

$$\sum_{i=0}^p (n-i) \binom{p}{i}$$

$$(n) \binom{p}{0} - (n-1) \binom{p}{1} + \dots$$

$$9 = 3 - 12 = 3 \times 1 - 3 \times 4$$

$$\sum_{i=0}^p (n-i) \binom{p}{i} + \sum_{i=0}^p \binom{p}{i} \quad (35)$$

$$\text{مفر} = \sum_{i=0}^p (n-i) \binom{p}{i} - \sum_{i=0}^p \binom{p}{i}$$

$$\sum_{i=0}^p (n-i) \binom{p}{i} - \sum_{i=0}^p \binom{p}{i} \quad (36)$$

$$\sum_{i=1}^n (x_i - \bar{x})^2 = \sum_{i=1}^n x_i^2 - n\bar{x}^2 \quad (20)$$

$$0 = 27 - 27$$

صفر (21)

$$\sum_{i=1}^n x_i^2 = 12 \quad (22)$$

$$\sum_{i=1}^n x_i^2 = (n - 1) s^2 + n\bar{x}^2$$

$$12 = 2 - 2$$

$$12 = 2$$

صفر (23)

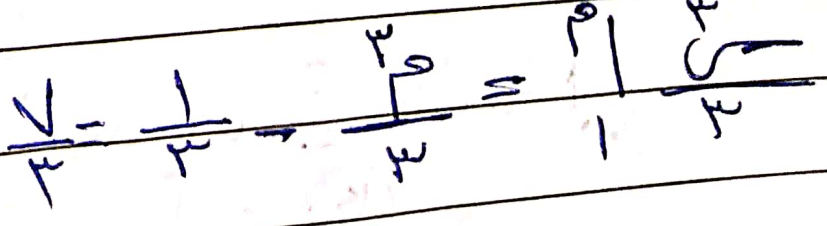
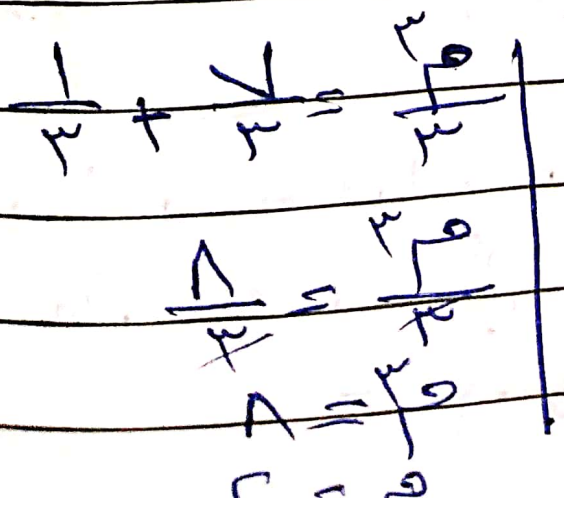
$$\sum_{i=1}^n x_i^2 = 0 \quad (24)$$

$$0 = (n - 1) s^2 + n\bar{x}^2$$

$$0 = 1 + 2$$

$$0 = 2$$

$$\sum_{i=1}^n x_i^2 = 1 \quad (25)$$



$$9 = \sum_{k=1}^p \sum_{l=1}^q (13)$$

$$9 = ((2) - 1) \times 4$$

$$4 = 2 + 2$$

$$1 = 1$$

$$\sum_{p=1}^q \sum_{k=1}^p (14) = \sum_{p=1}^q \sum_{k=1}^p (15)$$

$$2 \times 2 = 4 + 1 \times 1 = (2 - 1) - 1 \times 2$$

$$\sum_{k=1}^p \sum_{l=1}^q (16) = \sum_{k=1}^p \sum_{l=1}^q (17) + \sum_{k=1}^p \sum_{l=1}^q (18)$$

$$2 = 1 + 1$$

$$(19)$$

$$\sum_{k=1}^p \sum_{l=1}^q (20) = \sum_{k=1}^p \sum_{l=1}^q (21) = \sum_{k=1}^p \sum_{l=1}^q (22)$$

نستأر الفترة التي فيها [0, 6]

(27) 1

(28)  $9 = ((0) - 3) \cdot 1$

$9 = 0 + 3$

$7 = 0$

(29)  $z' = \cos(w) \cdot z'$   
 $(1) - (1) = 1 - 1 = 0$   
 $z = 1 - 1 = 0$

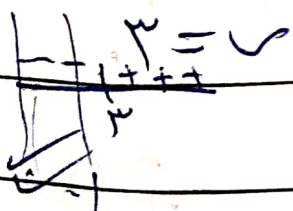
$(1) - (1) = 0$   
 $z = 1 - 1 = 0$

(30)  $\cos(w) \cdot (1 + z) = (1) - (1)$

$\cos(w) \cdot (1 + z) = (1) - (1)$   
 $z = 0$

(31)  $\cos(w) \cdot (z - 1) = (1) - (1)$

$z = 1 - 1 = 0$



$z = 1 - 1 = 0$   
 $z = 1 - 1 = 0$

$$\textcircled{51} \quad \binom{7}{1} 2^1 = \binom{7}{1} 2^1 + \binom{7}{1} 2^0$$

$$7 = \frac{14}{2} - \frac{14}{2} + \frac{7}{1}$$

٥٢ بالتعويض بعدد يقع في الفترة ونجرب الأعداد

$$\binom{7}{1} 2^1 < 7 \cdot \binom{7}{1} 2^0$$

$$\textcircled{53} \quad 3 - 7 + \frac{7}{2} \times 2 = \binom{7}{2} 2^2 + \binom{7}{1} 2^1$$

$$\textcircled{54} \quad 1 = 2 \times 2 = \binom{7}{2} 2^2 + \binom{7}{1} 2^1$$

٥٥ صفر

$$\textcircled{56} \quad \binom{11}{1} 2^0 = \binom{11}{2} 2^1 + \binom{11}{3} 2^2 + \binom{11}{4} 2^3$$

$$11 = 2 + 7 + 3$$

$$\textcircled{57} \quad \binom{11}{3} 2^3 = \binom{11}{4} 2^4 + \binom{11}{5} 2^5$$

$$11 = 4 + 7$$

$$r = ns \cdot (n) \sum_{p=1}^n \frac{1}{p} \quad (58)$$

$$\frac{r}{s} = (n) \sum_{p=1}^n \frac{1}{p} \quad \leftarrow \quad \frac{r}{s} = (n) \sum_{p=1}^n \frac{1}{p}$$

$$\sum_{p=1}^n (n) \frac{1}{p} = (n) \sum_{p=1}^n \frac{1}{p} \quad (59)$$

$$\begin{aligned} & ((n) \frac{1}{s} - (s) \frac{1}{n}) r = \\ & 15 = 5 \times r = (5 - 9) r = \end{aligned}$$

$$(n) \sum_{p=1}^n \frac{1}{p} = (n) \sum_{p=0}^n \frac{1}{p} + (n) \sum_{p=1}^0 \frac{1}{p} \quad (60)$$

$$r = 5 \times \frac{1}{s} = ns \cdot (n) \frac{1}{s} \sum_{p=1}^n \frac{1}{p} \quad \therefore \quad \Sigma = \Sigma - + 1$$

$$r_0 = ns \cdot 0 \sum_{p=1}^n \frac{1}{p} \quad (61)$$

$$0 \div r_0 = (r - r) \cdot 0$$

$$\Sigma = r - 0$$

$$r = 0$$

$$0 = \Sigma \quad (62)$$

$$1 = \sqrt{5} \cdot \sqrt{2} \sum_1^2 \quad (14)$$

$$r = 1 \times r = \sqrt{2} \sqrt{r} \sum_1^2 = \frac{\sqrt{2} \times \sqrt{r}}{\sqrt{2}} \sum_1^2 = \sqrt{r} \sum_1^2$$

$$r = \sqrt{5} \cdot (\omega) \sum_0^1 \quad r = (\omega) \sum_0^1 \quad (15)$$

$$(\omega) \sum_0^1 = (\omega) \sum_0^1 + (\omega) \sum_0^1 \therefore r = (\omega) \sum_0^1$$

$$0 = r + r$$

$$10 = 0 - r = (\omega) \sum_0^1 \therefore$$

$$r + \omega = (\omega) \sum_0^1 \quad (16)$$

$$(r+1) - (r+\omega) = 1 \quad | \quad r + \omega = \sqrt{5} \cdot (\omega) \sum_0^1$$

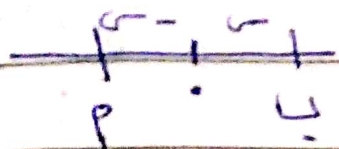
$$r = r - 0$$

$$10 = r \times 0 = (\sqrt{5} - \sqrt{2}) 0 = (\omega) \sum_0^1 \quad (17)$$

$$r \rightarrow 1 \text{ or } 0 = 1$$

$$\sqrt{5} \cdot \sqrt{2} \sum_1^2 = \sqrt{5} \cdot r \times \sqrt{r} \sum_1^2 \quad (18)$$

$$r = r \times r = (1 - \sqrt{2}) r = 1 \quad | \quad r = 1$$



$$r = \frac{u}{1-u} \cdot \frac{u}{1-u} \cdot \frac{u}{1-u} \quad (78)$$

$$r = \frac{u}{1-u} \cdot \frac{u}{1-u} + \frac{u}{1-u} \cdot \frac{u}{1-u}$$

$$r = 1 \cdot \frac{u}{1-u} + 1 \cdot \frac{u}{1-u}$$

$$r = (1+u) \cdot \frac{u}{1-u} + (1+u) \cdot \frac{u}{1-u}$$

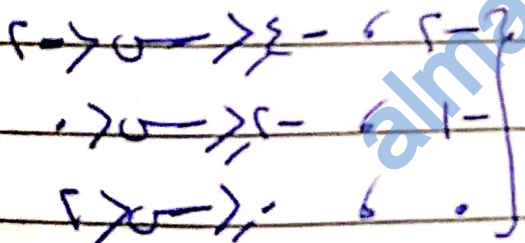
$$\textcircled{1} \leftarrow r = u + P$$

من طرف الـ P إلى الـ U →

$$r = \frac{u - P}{1 - P}$$

$$r = P$$

$$r = \frac{u}{1-u} \quad r = P$$



$$r = \frac{u}{1-u} + \frac{u}{1-u} \cdot \frac{u}{1-u} + \frac{u}{1-u} \cdot \frac{u}{1-u} \cdot \frac{u}{1-u} \quad (79)$$

$$(1+u) \cdot \frac{u}{1-u} + (1+u) \cdot \frac{u}{1-u}$$

$$r = \frac{u}{1-u} + \frac{u}{1-u} = r \cdot 1 + r \cdot u$$

$$r = \frac{u}{1-u} \quad r = P$$



$$r = \frac{u}{1-u} + \frac{u}{1-u} \cdot \frac{u}{1-u} + \frac{u}{1-u} \cdot \frac{u}{1-u} \cdot \frac{u}{1-u} \quad (80)$$



$r = s \quad |r - s|$   
~~++~~  
~~2~~

$r = d \leq 1$   
 $r > 0 \rightarrow r \in \{1\}$

$s \cdot 1 + r - 0 = 2^r$

$s \cdot 1 - r = 2^{r-1}$

$\frac{3}{2} = (r - r) = (3 - \frac{3}{2})$

$n = 1$

$r > 0 \rightarrow r \in \{1\}$

$r > 0 \rightarrow r \in \{1\}$

$s + r = 2^r$

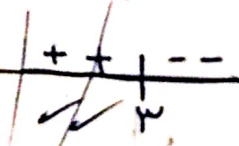
$n = (n - n^2) \cdot 1$

$r = s + 1 \quad |r - s|$

$r > 0 \rightarrow r \in \{3\}$

$s = |s - 3|$

$r = s$

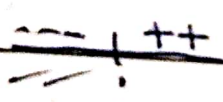


$\frac{3}{2} = \frac{1}{2} - r =$

$s \cdot |s - 3| - [r + s] = 2^r$

$s \cdot (s - 3) - 3 = 2^r$

$\frac{3}{2} = s \cdot s = 2^r$



$s \cdot |s - 1| + s = 3 = 2^r$

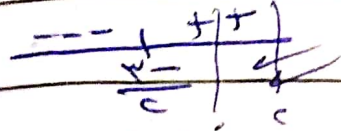
$0 - 2 - 2 = \frac{3}{2} = s \cdot s = 2^r$

(٧٥)  $2^2 | 3 + 3 + 3 = 6$

$3 + 3 = 6$

$3 = 3$

$\frac{2}{2} = 1$



$2^2 | 3 + 3 + 3 = 6$

$1 = 1 + 1 = 2$

$1 + 1 = 2$

(٧٦)  $2^1 [1 + 3] = 8$

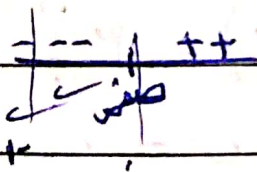
$1 + 1 = 2$

$1 + 1 = 2$

$[2^1 + 2^1] = 4$

$2 = 1 \times 2 = (1 + 1)$

(٧٧)  $2^2 = 4$

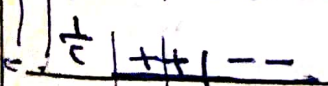


(٧٨)  $2^1 = 2$

$1 + 1 = 2$

(٧٩)  $2^1 = 2$

$1 + 1 = 2$



$2^1 = 2$

$1 + 1 = 2$

$2 = (1 + 1)$

التاريخ	/	/	١٤
الموافق	/	/	

التاريخ \_\_\_\_\_  
 اليوم \_\_\_\_\_  
 Subject \_\_\_\_\_  
 Day \_\_\_\_\_  
 Date / / \_\_\_\_\_  
 عنوان الدرس \_\_\_\_\_

$$\sum_{i=1}^3 2^i = 2 + 4 + 8 = 14 \quad (A)$$

$$7 = 2 + 5 = (1 + 3 + 5) - (1 + 3) = \sum_{i=1}^3 2^i - \sum_{i=1}^2 2^i$$

$$1 = \frac{2}{2} - \frac{3}{2} = \frac{2-3}{2}$$

$$2 = \frac{2}{2} - \frac{3}{2} + 2 \quad (B)$$

$$\begin{aligned} 6 > 5 > 3 > 1 \\ 9 > 8 > 7 > 6 > 2 \end{aligned}$$

$$2 = \frac{2}{2} - \frac{3}{2} + 2 \quad (C)$$

$$14 = 2 + 4 + 8 = 2 \times 2 + 3 \times 1 + 0 \times 2$$

$$2 = \frac{1+0}{1-P}$$

$$12 = \frac{2^4}{P} \quad (D)$$

$$= (1-P) - (1+0) \times 2$$

$$12 = (P-0) \times 2$$

$$6 = P - 0$$

$$14 = (2+6) \times 2 = (2+P-0) \times 2$$

$$2 = \frac{2}{2} - \frac{3}{2} + 2 \quad (E)$$

$$\begin{aligned} 2 > 1 > 0 \\ 3 > 2 > 1 > 0 \end{aligned}$$

$$2 = \frac{2}{2} - \frac{3}{2} + 2$$

$$2 = 2 + 0$$

$$2 = 2$$

$$\textcircled{A3} \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.} \quad | \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.}$$



$$\sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.} \quad | \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.}$$

$$\textcircled{A6} \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.} \quad | \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.}$$

توزيع 2 داخل القوس

$$\sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.} \quad | \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.}$$

قلبتنا حدود التكامل

$$\textcircled{A9} \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.} \quad | \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.}$$

$$\textcircled{A7} \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.} \quad | \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.}$$

$$\sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.} \quad | \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.}$$

$$\textcircled{A8} \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.} \quad | \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.}$$

$$\sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.} \quad | \quad \sqrt{1-u} = \sqrt{1-u} \quad \text{و.س.}$$

$$\xi = \dots (P - \dots) \quad (M)$$

$$\xi = \dots | \dots - P - \dots$$

$$\xi = \dots (P - 1) - (P \dots - \dots)$$

$$\xi = \dots (P + 1 - P \dots - \dots)$$

$$\xi = \dots (P - 3)$$

$$V = P$$

$$P = \xi + W$$

$$(1 + \dots) - (1 + \dots) = \dots | 1 + \dots - \dots = \dots (1 + \dots) \quad (N)$$

$\dots = 1 - 3$

$$1 = \dots + \dots + \dots$$

$$\dots [1 + \dots] \quad (9)$$

$$\dots \dots \dots$$

$$\dots = (\dots - \dots) | \dots = \dots \dots \dots$$

أولاً نوزع  
صعود  
التكامل

$$\dots \dots \dots = \dots \dots \dots \quad (10)$$

$$\dots \dots \dots - (\dots + \dots) \dots$$

$$\dots \dots \dots - (\dots) \dots$$

$$1 = \dots - 0$$

$$\textcircled{93} \sum_{i=1}^3 s_i = s_1 + s_2 + s_3 = 10 - P$$

① التوزيع

تبادل الأجزاء

$$\sum_{i=1}^3 s_i = s_1 + s_2 + s_3 = 10 - P$$

$$\sum_{i=1}^3 s_i = s_1 + s_2 + s_3 = 10 - P$$

س	قوة (س)
1	7
2	1

$$s_1 + s_2 + s_3 = 10 - P$$

$$s_1 + s_2 + s_3 = 10 - P$$

$$5 + 1 + 4 = 10 - P$$

$$10 - P = 10 - P$$

$$10 - P = 10$$

$$0 = P \leftarrow P = 0$$

$$\textcircled{94} \sum_{i=1}^3 s_i = s_1 + s_2 + s_3 = 10 - P$$

$$3 \times 2 \geq (s_1) + (s_2) + (s_3)$$

ظروف الحدود الكامل

$$3 \times 2 \geq (s_1) + (s_2) + (s_3)$$

$$6 \geq (1+0) + 6$$

$$\textcircled{95} 6 \geq (s_1) + (s_2) + (s_3)$$

$$\textcircled{96} \sum_{i=1}^3 s_i = s_1 + s_2 + s_3 = 10 - P$$

$$1 = 1$$

$$1 > 3 - 3 - 6 - 3 - 1 > 3 - 1$$

$$1 = 10 - P \Rightarrow P = 9 = (3+1) - (6+3) = 10 - P$$

$$12 = \sum_{r=0}^3 (u-r) \cdot P \quad (95)$$

$$12 = \sum_{r=0}^3 (u-r) \cdot P$$

$$3 = P \quad \therefore \quad 12 = 4 \times P$$

بالاجزاء

$$\sum_{r=0}^3 (u-r) \cdot P = \sum_{r=0}^3 (u-r) \cdot P + \sum_{r=0}^3 (u-r) \cdot P \quad (96)$$

عدد	عدد
3	2
2	1
1	0
0	0

$$(0-P) \cdot 1 = \sum_{r=0}^3 (u-r) \cdot P + \sum_{r=0}^3 (u-r) \cdot P$$

عدد (1) = 2 - 3

$$0 - P = \sum_{r=0}^3 (u-r) \cdot P$$

$$0 - P = (3) \cdot 1 - (2) \cdot 2$$

$$0 - P = 3 \times 1 - 2 \times 2$$

$$P = 1$$

$$0 - P = 1$$

$$\sum_{r=0}^3 (u-r) \cdot P = \sum_{r=0}^3 (u-r) \cdot P \quad (97)$$

$$17 - 1 - 10 - 1 = (1-2) - (2-1) =$$

كامل بالنتيجة

دالة خصائص

$$A = \sum_{r=0}^3 (u-r) \cdot P \quad (98)$$

$$1 = \frac{((3-1) \cdot P) - ((2-1) \cdot P)}{((3-1) \cdot P)}$$

عدد (1) = 1

$$17 = 1 \cdot P \rightarrow 17 = P$$

(99)  $\int \frac{1}{s^2} ds = -\frac{1}{s} + C$

$\int \frac{1}{s^2} ds = \int s^{-2} ds = \frac{s^{-2+1}}{-2+1} = \frac{s^{-1}}{-1} = -\frac{1}{s} + C$

تكرار

تكامل بالاجزاء

$\int \frac{5}{s^3} ds$	$\frac{5}{s^2}$	$\frac{1}{s}$
$\frac{5}{s^2}$	$-\frac{1}{s}$	$1$
$\frac{5}{s}$	$1$	$0$

(100)  $\int \frac{5}{s^3} ds = \frac{5}{s^2} - \frac{1}{s} + C$

$\int \frac{5}{s^3} ds = \frac{5}{s^2} - \frac{1}{s} + C$

$\frac{5}{s^2} - \frac{1}{s} = \frac{5s - 1}{s^2}$

$\frac{5}{s^2} = \frac{5}{s^2} - \frac{0}{s} = \frac{5}{s^2} = \frac{5}{s^2}$

(101)  $\int \frac{3s^2 + 5s + 2}{s^2 + 2s + 1} ds$

$\frac{3s^2 + 5s + 2}{s^2 + 2s + 1} = \frac{3(s^2 + 2s + 1) + (s + 2)}{s^2 + 2s + 1}$

$\int \frac{3(s^2 + 2s + 1) + (s + 2)}{s^2 + 2s + 1} ds = \int (3 + \frac{s + 2}{s^2 + 2s + 1}) ds$

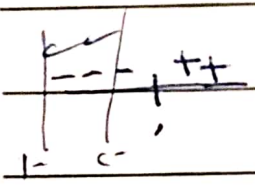
$\int 3 ds = 3s + C$



$$n \cdot (n)P_7 = (n)P_7 + (n)P_9 \quad (1.2)$$

$$(n)P_7 = (n)P_7 + (n)P_9$$

$$7 = 9 \quad (n)P_7 = (n)P_9$$



$$n \cdot \frac{2-5}{1-1-5} = \dots \quad (1.3)$$

$$\frac{2-5}{(n)-5} = \dots$$

$$n \cdot (n-5) = (n+5)(n-5)$$

$$\frac{1}{n} = \frac{1}{n-5} = \dots$$

$$\sqrt{(n+3)} = n \quad (n)5 = \dots \quad (1.4)$$

$$\frac{(n)5}{\sqrt{(n+3)}} = \dots$$

$$\frac{1}{\sqrt{(n+3)}} = \dots$$

$$10 = \sum_{r=0}^1 \binom{n}{r} 2^r \quad \& \quad 7 = \sum_{r=0}^3 \binom{n}{r} 2^r \quad (1.6)$$

$$3 = \sum_{r=0}^1 \binom{n}{r} 2^r \quad 4 = \sum_{r=0}^2 \binom{n}{r} 2^r$$

$$\binom{n}{0} 2^0 = \binom{n}{0} 2^0 + \binom{n}{1} 2^1$$

$$1 = 3 + 2$$

$$r = 0 \Rightarrow \frac{1}{2} \quad r = 1$$

$$r > 0 \Rightarrow \frac{1}{2} \quad r = 1$$

$$\sum_{r=0}^1 \binom{n}{r} 2^r = \frac{(2+0)}{[1-\frac{1}{2}]} \quad (1.7)$$

$$\sum_{r=0}^3 \binom{n}{r} 2^r = \sum_{r=0}^2 \binom{n}{r} 2^r = \frac{(2+0)}{[1-\frac{1}{2}]}$$

توزيع دالة العوا

$$\sum_{r=0}^1 \binom{n}{r} 2^r + \sum_{r=0}^2 \binom{n}{r} 2^r$$

$$\binom{n}{0} 2^0 + \binom{n}{1} 2^1 = \binom{n}{0} 2^0 + \binom{n}{1} 2^1$$

$$\left( \binom{n}{0} + \binom{n}{1} \right) = 3 + \sum_{r=0}^2 \binom{n}{r} 2^r$$

$$12 = 3 + 9$$

(1.8)  $\sum_{i=1}^n (a_i + b_i) = \sum_{i=1}^n a_i + \sum_{i=1}^n b_i$

$\sum_{i=1}^n c_i a_i = c \sum_{i=1}^n a_i$

بالفرض  $\sum_{i=1}^n a_i = A$

(1.9)  $\sum_{i=1}^n a_i \leq A$

$\sum_{i=1}^n c a_i \leq c A$

$\sum_{i=1}^n a_i \leq A$

$\sum_{i=1}^n c a_i \leq c A$

(10)

$\sum_{i=1}^n c a_i \leq c A$

(11)  $\sum_{i=1}^n (a_i + b_i) = \sum_{i=1}^n a_i + \sum_{i=1}^n b_i$

$\sum_{i=1}^n c a_i = c \sum_{i=1}^n a_i$

$p = 5.9 + 1 = 6.9$

(11)  $\sum_{i=1}^n \left[ \frac{a_i}{n} + 1 \right] = \sum_{i=1}^n \frac{a_i}{n} + \sum_{i=1}^n 1$

$\sum_{i=1}^n a_i + \sum_{i=1}^n 1 = \sum_{i=1}^n a_i + n$

$\sum_{i=1}^n (a_i + 1) = \sum_{i=1}^n a_i + n$

$\sum_{i=1}^n a_i + n = \sum_{i=1}^n a_i + n$

$\sum_{i=1}^n a_i = \sum_{i=1}^n a_i$

بالفرض  $\sum_{i=1}^n a_i = A$

$\sum_{i=1}^n a_i = A$

$\sum_{i=1}^n a_i + n = A + n$

$$\varepsilon = \sum_{v=0}^{\infty} s \cdot (v) \cdot 2^v \leftarrow 15 = \sum_{v=0}^{\infty} s \cdot (v) \cdot 2^v \quad (112)$$

$$\sum_{v=0}^{\infty} = \sum_{v=0}^{\infty} + \sum_{v=1}^{\infty}$$

$$1 = \sum_{v=0}^{\infty} s \cdot (v) \cdot 2^v$$

$$s \cdot (s) \cdot 2^0 \rightarrow s \cdot (-3 + v) \cdot 2^{v-1}$$

$$7 = 1 - \varepsilon + \varepsilon^2$$

$$\frac{15}{\varepsilon} = \sum_{v=0}^{\infty} s \cdot (v) \cdot 2^v \leftarrow \frac{15}{\varepsilon} = \sum_{v=0}^{\infty} s \cdot (v) \cdot 2^v \quad (113)$$

$$7 = \sum_{v=0}^{\infty} s \cdot (v) \cdot 2^v \leftarrow 7 = \sum_{v=0}^{\infty} s \cdot (v) \cdot 2^v$$

$$\frac{0}{\varepsilon} = \frac{1}{\varepsilon} = 7 + \frac{15}{\varepsilon} = \sum_{v=0}^{\infty} s \cdot (v) \cdot 2^v = \sum_{v=0}^{\infty} + \sum_{v=1}^{\infty} \therefore$$

$$7 = s \cdot (s \cdot P) + s \cdot 2^{\varepsilon} \quad (114)$$

بالتعويض

بالتعويض  $\frac{1}{\varepsilon} = P$

$$\varepsilon = 0$$

$$\frac{1}{\varepsilon} = 0 \times \frac{1}{\varepsilon}$$

$$= s \cdot \left[ s \cdot \frac{1}{\varepsilon} \right] \cdot 2^{\varepsilon}$$

$$? = ? = \text{صفر}$$

$$7 = s \cdot [s \cdot P] \cdot 2^{\varepsilon} + s \cdot 2^{\varepsilon}$$

$$7 = [s \cdot P] \cdot 2^{\varepsilon} + \frac{1}{\varepsilon} \cdot \frac{1}{\varepsilon}$$

$$7 = [s \cdot P] \cdot 2^{\varepsilon} + \varepsilon - 1$$

$$\text{صفر} = s \cdot [s \cdot P] \cdot 2^{\varepsilon}$$