وزارة التربية والتعليم و التعليم الفنى
الادارة المركزية للتعليم العام
إدارة تنمية مادة الرياضيات

برعاية معالي وزير التربية والتعليم و التعليم الفنى

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وتوجيهات رئيس الادارة المركزية للتعليم العام
المشرف على مستشارى المواد الدراسية

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إشراف علمي
مستشار الرياضيات

أ/ منال عزقول

أداءات وتقييمات لمنهج الرياضيات البحتة لغات

للصف الثانى الثانوي "علمى"
الفصل الدراسى الثانى
للعام الدراسي ٢٠٢٥ / ٢٠٢٦

الأسبوع الخامس

إعداد

أ/ إيهاب فتحى أ/ محمد الفار أ/ محمود سلام

ترجمة

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⑤ الرياضيات البحتة لغات ـ للصف الثاني الثانوي علمي الأداء الصفى الأسبوع الحامس ⑤

First: Algebra- the sequences and Series:

1) An arithmetic sequence its second term equals 8 and its nineth term equals – 13. Find the sequence, then find its seventh term.

Solu: .....

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2) Insert 20 arithmetic means between 14 and 77.

Solu: .....

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3) If x ,7, 10, y are four consecutive terms in an arithmetic sequence, then find x and y.

Solu: .....

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4) An arithmetic sequence its second term equals 11 and its eleventh term equals 8, then find its eighth term.

Solu: .....

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5) If we insert 10 arithmetic means between 2 and -20 ,then find the fourth mean.

Solu: .....

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Second: Calculus and integration -Unit three

6) If $y = 5x^3+4x - 7$, Find $\frac{dy}{dx}$

Solu: .....

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7) If $y = 2x^4(8x + 3)$, Find $\frac{dy}{dx}$

Solu: .....

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8) If $y = (5x^3 - x)(2x^2 - 1)$, Find $\frac{dy}{dx}$

Solu: .....

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Third: Trigonometry-Unit four

9) ABC is a triangle in which tan A = $\frac{3}{4}$ and tan B = $\frac{1}{7}$, find without using calculator m (∠ C).

Solu: .....

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10) If Sin A = $\frac{3}{5}$, Cos B = $\frac{5}{13}$ (such that A and B are two acute angles), then find Sin (A+B) and Cos (A-B)

Solu: .....

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⑤ الرياضيات البحتة لغات ـ للصف الثاني الثانوي علمي الأداء المنزلى الأسبوع الخامس ⑤

First: Algebra- the sequences and Series:

1) An arithmetic sequence its first term equals 7 and its seventh term equals 19. Find the sequence, then find its fourth term.

Solu: .....

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2) Insert 20 arithmetic means between 15 and 78.

Solu: .....

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3) If x ,6, 11, y are four consecutive terms in an arithmetic sequence, then find x and y.

Solu: .....

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4) An arithmetic sequence its sixth term equals 13 and its common difference equals 2, then find the sequence.

Solu: .....

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5) If we insert 10 arithmetic means between 2 and -20, then find the fourth mean.

Solu: .....

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Second: Calculus and integration -Unit three

6) If $y = 8x^4+2x^3 - 1$, Find $\frac{dy}{dx}$

Solu: .....

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7) If $y = 3x^5(4x - 7)$, Find $\frac{dy}{dx}$

Solu: .....

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8) If $y = (4x^2 -3x)(x^2+ 6)$, Find $\frac{dy}{dx}$

Solu: .....

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Third: Trigonometry-Unit four

9) ABC is a triangle in which $\tan A = \frac{1}{2}$ and $\tan B = \frac{1}{3}$, find without using calculator m ($\angle$ C).

Solu: .....

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10) If $\cos A = \frac{3}{5}$ (such that A is an acute angles), then find $\sin(A+30°)$

Solu: .....

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The first group:

1) An arithmetic sequence its third term = 7 and its fourth term = 10.
Find the sequence, then find its nineth term.

Solu: .....

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2) Insert 20 arithmetic means between 17 and 80.

Solu: .....

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3) If $y = 7x^3+6x^2 - 4$, Find $\frac{dy}{dx}$

Solu: .....

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4) If $y = (4x^2 -3x)(x^2+ 6)$, Find $\frac{dy}{dx}$

Solu: .....

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5) If Sin A = $\frac{3}{5}$ (such that A is an acute angles), then find Cos (A+30°)

Solu: .....

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The second group:

1) An arithmetic sequence its third term = 8 and its fourth term = 11.
Find the sequence, then find its nineth term.

Solu: .....

2) Insert 20 arithmetic means between 18 and 81.

Solu: .....

3) If $y = 8x^4+7x^3 - 5$, Find $\frac{dy}{dx}$

Solu: .....

4) If $y = (x^3 - x)(2x+ 3)$, Find $\frac{dy}{dx}$

Solu: .....

5) If Sin A = $\frac{3}{5}$ (such that A is an acute angles), then find Cos (A+45°)

Solu: .....

The third group:

1) 1) An arithmetic sequence its third term = 9 and its fourth term = 12.
   Find the sequence, then find its nineth term.

Solu: .....

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2) Insert 20 arithmetic means between 20 and 83.

Solu: .....

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3) If $y = 9x^5+5x^3 - 2$, Find $\frac{dy}{dx}$

Solu: .....

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4) If $y = (x^4 -2x)(4x+ 6)$, Find $\frac{dy}{dx}$

Solu: .....

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5) If Sin A = $\frac{3}{5}$ (such that A is an acute angles), then find Cos (A+60°)

Solu: .....

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