

تم تحميل هذا الملف من موقع المناهج الإماراتية



أسئلة الاختبار التجريبي استعداداً للامتحان

موقع المناهج ← المناهج الإماراتية ← الصف الحادي عشر العام ← رياضيات ← الفصل الأول ← اختبارات ← الملف

تاريخ إضافة الملف على موقع المناهج: 2024-11-18 22:06:32

ملفات اكتب للمعلم اكتب للطالب الاختبارات الكترونية | اختبارات | حلول | عروض بوربوينت | أوراق عمل
منهج انجليزي | ملخصات وتقارير | مذكرات وبنوك | الامتحان النهائي للمدرس

المزيد من مادة
رياضيات:

إعداد: مدرسة الطموح

التواصل الاجتماعي بحسب الصف الحادي عشر العام



صفحة المناهج
الإماراتية على
فيسبوك

الرياضيات

اللغة الانجليزية

اللغة العربية

التربية الاسلامية

المواد على تلغرام

المزيد من الملفات بحسب الصف الحادي عشر العام والمادة رياضيات في الفصل الأول

حل تجميعية أسئلة الوحدات الثانية والثالثة وفق الهيكل الوزاري منهج ريفيل

1

حل تجميعية أسئلة الوحدة الأولى Quadratic functions وفق الهيكل الوزاري منهج ريفيل

2

تجميعية أسئلة الوحدة الأولى Quadratic functions وفق الهيكل الوزاري منهج ريفيل

3

حل ملزمة تجميعية أسئلة وفق الهيكل الوزاري منهج بريدج

4

تجميعية أسئلة مراجعة وفق الهيكل الوزاري منهج بريدج

5



الامتحان التجريبي لمادة (.....) نهاية الفصل الدراسي الأول 2024/2025 Mock Exam- (.....) subject End of Term One- 2024/2025

	اسم الطالبة / Student Name
	رقم الطالبة / Students number
AlTomooh School C1-2-3 الطموح ح 3-2-1	المدرسة / School
	الصف / Class
	المسار / Stream
	المادة / Subject

المعرفة أو المهارة التي يجب أن أركز عليها	الدرجة / Mark	السؤال / Question
The knowledge or skill I should focus on		
Find and interpret the average rate of change of quadratic functions given symbolically, in tables, and in graphs		1
Solve quadratic equations by graphing		2
Solve quadratic equations by graphing		3
Perform operations with complex numbers		4
Perform operations with complex numbers		5
Solve quadratic equations by factoring		6
Complete the square in the case of a trinomial that is not a perfect square		7
Write each function in vertex form		8
Solve quadratic inequalities in one variable		9
Graph polynomial functions and locate their zeros		10
Find the relative maxima and minima of polynomial functions		11
Add, subtract, and multiply polynomials		12
Divide polynomials using synthetic division		13
Use the factor theorem to determine factors of polynomials		14
Solve polynomial equations by factoring		15
Graph quadratic functions		16
Solve quadratic equations by using the Quadratic Formula		17
Divide polynomials using long division or synthetic division		18
Use Pascal's Triangle to write binomial expansions		19
Factorize polynomials		20

1	Find and interpret the average rate of change of quadratic functions given symbolically, in tables, and in graphs	13- 21	P 10
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Determine the average rate of change of $f(x)$ over the specified interval.

interval $[-3, 3]$

x	f(x)
-3	0
-2	3
-1	-4
0	-3
1	0
2	5
3	12

a) 4

b) 2

c) 6

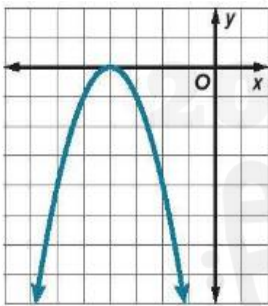
d) 0.125

$F(x_2) - f(x_1)$
 $X_2 - x_1$

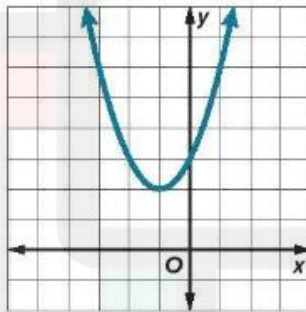
2	Solve quadratic equations by graphing	1-10	P 17
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Match related graph of each equation to determine its solutions.

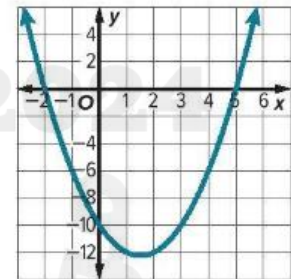
1. $x^2 + 2x + 3 = 0$



2. $x^2 - 3x - 10 = 0$



3. $-x^2 - 8x - 16 = 0$



3	Solve quadratic equations by graphing	50-53	P 19
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Use a quadratic equation to find two real numbers that satisfy each situation or show that no such numbers exist.

Their sum is 4, and their product is -117.

a) -9,13

b) -9 , -13

c) 9 , -13

d) 9 , 13

4	Perform operations with complex numbers put your calculator on complex mode (Mode 2 or Menu,2)	1-12	P 25
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Simplify.

$$(8 + 3i) - (6 - 2i)$$

- a) $8 + 3i$
c) $2 - 5i$

- b) $14 + i$
d) $2 + 5i$

5	Perform operations with complex numbers put your calculator on complex mode (Mode 2 or Menu,2)	25-37	P 25
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Simplify

$$4i(-6i)^2$$

- a) -144
c) $-144i$

- b) 144
d) $144i$

6	Solve quadratic equations by factoring	15-32	P 31
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6) Find the solutions of $x^2 - 3x - 10 = 0$

- a) $\{5, 0\}$
c) $\{-2, 3\}$

- b) $\{-3, 9\}$
d) $\{5, -2\}$

7	Complete the square in the case of a trinomial that is not a perfect square	19--24	P 39
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Find the value of c that makes each trinomial a perfect square. Then write the trinomial as a perfect square trinomial.

$$19. x^2 + 10x + c$$

- a) 5
c) -5

- b) $(5)^2$
d) $(-5)^2$

8	Write each function in vertex form	44- 49	P 40
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Write each function in vertex form. Find the axis of symmetry. Then find the vertex and determine if it is a maximum or minimum.

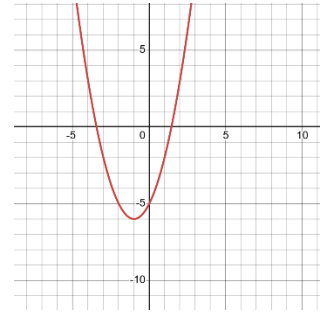
44. $y = x^2 + 2x - 5$

a) Maximum at $x=-1$

b) Minimum at $x=-1$

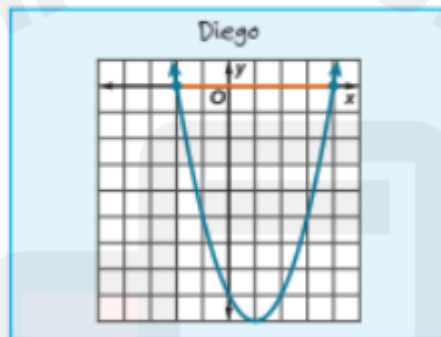
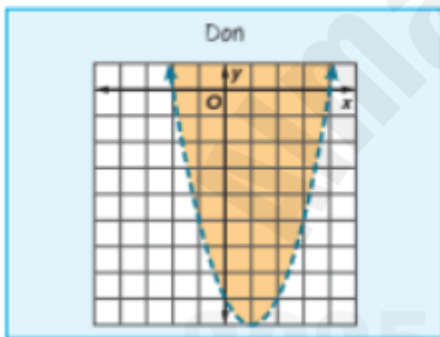
c) Maximum at $x=1$

b) Minimum at $x=1$



9	Solve quadratic inequalities in one variable	21-29	P 55
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FIND THE ERROR Don and Diego used a graph to solve the quadratic inequality $x^2 - 2x - 8 > 0$. Is either of them correct? Explain your reasoning.



a) Don is True

b) Diego is true

c) Both are True

b) Both are wrong

10	Graph polynomial functions and locate their zeros	Example 5	P 77
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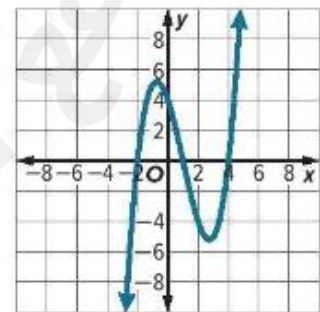
Use the graph to state the number of real zeros of the function.

a) 2 real solutions

b) Only one real solution

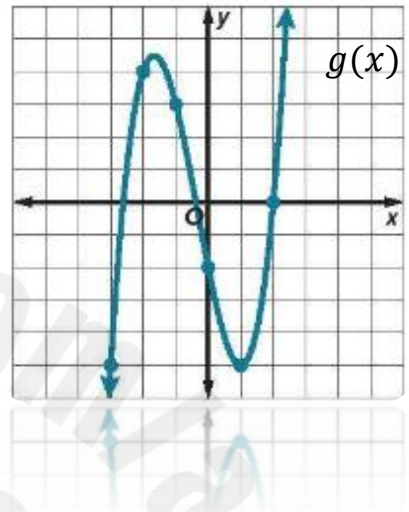
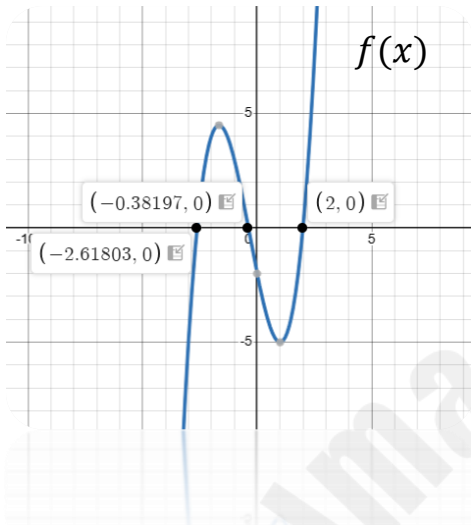
c) 3 real solutions

b) 4 real solutions



11	Find the relative maxima and minima of polynomial functions	Example 2	P 84
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Use a table to graph $f(x) = x^3 + x^2 - 5x - 2$. Estimate the x-coordinates at which the relative maxima and relative minima occur.



- a) $f(x)$
 b) $g(x)$
 c) both same

- b) $g(x)$
 b) None

12	Add, subtract, and multiply polynomials	30-39	P 98
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Simplify.

$$5xy(2x - y) + 6y^2(x^2 + 6)$$

- a) $10x^2y - 5xy^2 + 6x^2y^2 + 36y^2$
 b) $10x^2y + 6x^2y^2 + 31y^2$
 c) $5x^2y + 6x^2y^2 + 36y^2$
 d) $10x^2y + 6xy^2 - 5x^2y^2 + 36y^2$

13	Divide polynomials using synthetic division	11-16	P 105
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Simplify using synthetic division.

$$(3t^4 + 4t^3 - 32t^2 - 5t - 20)(t + 4) - 1$$

- a) $3t^3 - 8t^2 + 5$
 b) $3t^3 + 8t^2 - 5$
 c) $3t^3 + 8t^2 + 5$
 d) $3t^3 - 8t^2 - 5$



14	Use the factor theorem to determine factors of polynomials	23 - 30	P 139
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Given a polynomial and one of its factors, find the remaining factors of the polynomial.

$24.x^4 + 2x^3 - 8x - 16 ; x + 2$

- | | |
|------------------------|------------------------|
| a) $(x-2)(x^2+2x+2^2)$ | b) $(x+2)(x^2-2x+2^2)$ |
| c) $(x+2)(x^2+2x+2^2)$ | d) $(x-2)(x^2-2x+2^2)$ |

15	Solve polynomial equations by factoring	1-10	P 127
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Factor completely. If the polynomial is not factorable, write prime.

$1.8c^3 - 27d^3$

- | | |
|-------------------------------|-------------------------------|
| a) $(2c + 3d)(4c^2-6cd+9d^2)$ | b) $(2c - 3d)(4c^2-6cd+9d^2)$ |
| c) $(2c - 3d)(4c^2+6cd+9d^2)$ | d) $(2c + 3d)(4c^2+6cd+9d^2)$ |

2. The factors of $x^2 - 100 = 0$

- | | |
|----------------------|-----------------------|
| a) $(x + 6)(x - 2)$ | b) $(x - 10)(x + 10)$ |
| c) $(3x - 7)(x + 3)$ | d) $(x + 11)(x + 3)$ |

16	Graph quadratic functions https://www.desmos.com/calculator/ejvto3xsdi	27 -32	P 11
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$f(x) = -3x^2 - 9x + 2$

a) Find the y-intercept, the equation of the axis of symmetry, and the x-coordinates of the vertex.

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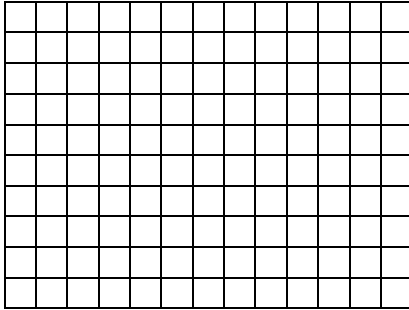
b) Make a table of values that includes the vertex.

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.....

 c) Use this information to graph the function



x						
$f(x)$						

17	Solve quadratic equations by using the Quadratic Formula	8-23	P 47
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Solve each equation by using the Quadratic Formula.

8. $x^2 + 2x - 35 = 0$

18	Divide polynomials using long division or synthetic division	31-34	107
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31. The volume of a cylinder is $\pi(x^3 + 32x^2 - 304x + 640)$. If the height of the cylinder is $x + 40$ feet, find the area of its base in terms of x and π

19	Use Pascal's Triangle to write binomial expansions	1-12	P 111
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Use Pascal's triangle to expand each binomial.

1. $(x - y)^3$

20	Factorize polynomials	Example 2	P 120
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For an exhibit with six or fewer Emperor penguins, the pool must have a depth of at least **4 ft.** and a volume of at least **1620 gallons**, or about **217 ft³**, per bird. If a zoo has five Emperor penguins, what should the dimensions of the pool shown at the right be to meet the minimum requirements? ($1 \text{ ft}^3 = 7.4805 \text{ gallon}$)

بالنسبة لمعرض يضم ستة طيور البطريق الإمبراطوري أو أقل، يجب أن يكون عمق المسبح 4 أقدام على الأقل وحجمه 1620 جالوناً على الأقل، أو حوالي 217 قدمًا مكعبًا، لكل طائر. إذا كانت حديقة الحيوانات تضم خمسة طيور بطريق إمبراطوري، فما هي أبعاد المسبح الموضحة على اليمين التي يجب أن تلبى الحد الأدنى من المتطلبات؟

