

تجميعات رياضيات الكويز الأول
وبالتوفيق للجميع ☆

Question No. 4

Select the correct property that describes the given equation.
 $15 \times (7 + 9) = 15 \times 7 + 15 \times 9$

- Commutative property of addition
- Inverse property of addition
- Distributive property
- Identity property of addition

Save & Next حفظ التالي

HP LE1901w



Question No. 3

Let $U = \{-2, -1, 1, 2, 3, 4\}$, $A = \{-1, 2, 4\}$ and $B = \{-2, -1, 3\}$, then $A \cap B =$

- {3}
- {-2, 3}
- {-2, -1, 3}
- \emptyset

Save & Next

HP LE1901w

B

Question No. 11

The solution set of $x^2 = 3x - 6$ is

$\left\{ \frac{3 \pm i\sqrt{15}}{2} \right\}$

$\{3 \pm \sqrt{3}\}$

$\left\{ \frac{3 \pm \sqrt{3}}{2} \right\}$

$\{3 \pm i\sqrt{15}\}$

A

Save & Next حفظ التالي

Question No. 5

Evaluate the expression : $-4(9-8) + (-7)(2)^3$

- 40
- 50
- 40
- 50

Save & Next

HP LE1901w

B

Question No. 1

Determine the following intersection $\emptyset \cap \{6,7\} =$

- {7}
- {6}
- \emptyset
- {6,7}



Save & Next حفظ و التالي

Question No. 10

The equation $x^2 + 225 = 0$ has

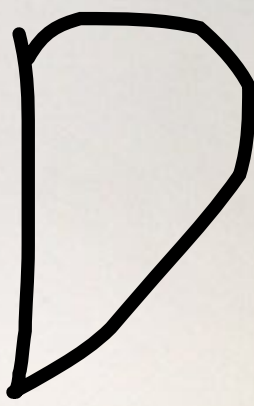
- 2 real solutions
- 2 imaginary solutions
- 1 real solution
- No solution

B

Question No. 2

The following expression $(1,4,7) \cap (4,5)$ is equivalent to

- $(1,4,5,7)$
- $(1,4,6)$
- \emptyset
- (4)



حفظ و التالي Save & Next

Question No. 11

The solution set of $5x^2 - 35x = 0$ is

- {0,5,7}
- {0,7}
- {0,5}
- {5,-7}

B

Question No. 12

Factor: $4x^2 - y^2 - 6y - 9$

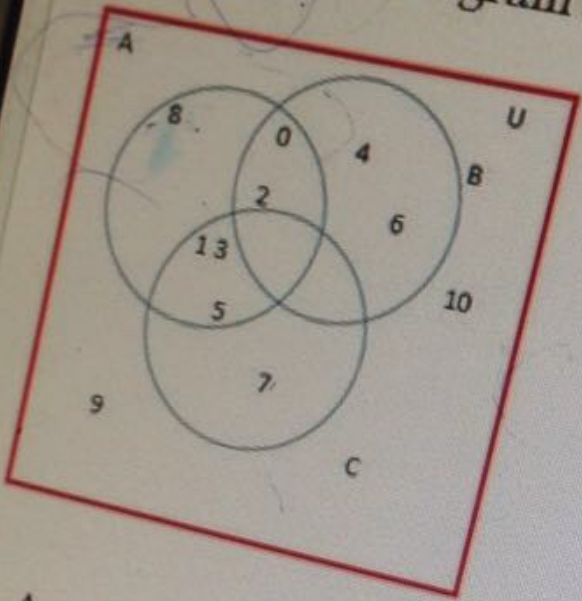
- (2x - y - 3)(2x + y + 3)
- (4x - y - 3)(4x + y + 3)
- (4x - y + 3)(4x + y - 3)
- (2x - y + 3)(2x + y - 3)

A

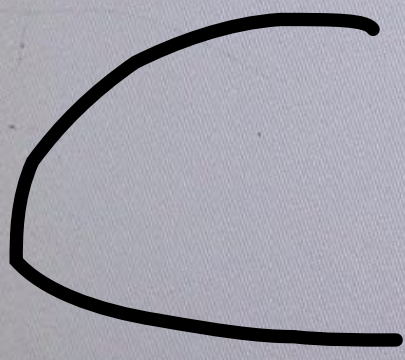
Save & Next

HP LE1901w

Use the Venn diagram to determine $A \cap B'$



- $A \cap B' = \{0, 2\}$
- $A \cap B' = \{0, 1, 2, 3, 5\}$
- $A \cap B' = \{1, 3, 5, 8\}$
- $A \cap B' = \{\}$



Question No. 17

Simplify $\left(\frac{-4n^6m^4}{m^2}\right)^{-3/2}$

- is not a real number
- $\frac{1}{8n^9m^3}$
- $\frac{1}{8n^9m^3}$
- $-8n^9m^3$

B

Question No. 4

Select the correct property that describes the given equation.
 $11 + (-11) = 0$

- Associative property of multiplication
- Commutative property of addition
- Inverse property of addition
- Identity property of addition



Question No. 4

Select the correct property that describes the given equation.
 $x + (y + 3) = x + (3 + y)$

- Associative property of multiplication
- Identity property of addition
- Commutative property of addition
- Inverse property of addition



Question No. 15

Simplify the compound rational expression. Use either method.

$$\frac{1 + \frac{3}{y-6}}{y + \frac{9}{y-6}}$$

$\frac{1}{y-3}$

$\frac{4}{y+9}$

$\frac{1}{y} + \frac{1}{3}$

$\frac{1}{y+3}$

A

Question No. 7

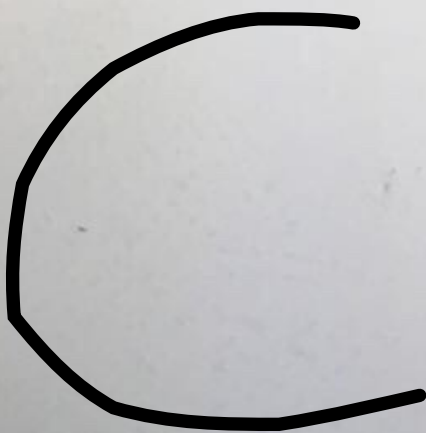
Solve $A = P(1 + nr)$ for r

$r = \frac{P-A}{Pn}$

$r = \frac{Pn}{A-P}$

$r = \frac{A-P}{Pn}$

$r = \frac{A}{n}$



Question No. 2

Use set notation, and write the elements belonging to the set
(x | x is a natural number less than 1)

- \emptyset
- $\{\emptyset\}$
- $\{1\}$
- $\{0\}$

A

حفظ و التالي Save & Next

Simplify: $\sqrt[3]{(x-7)^8}$

- $|x-7|$
- $(x-7)$
- $|x-7|^8$
- $(7-x)$

A

When factored completely $25x^2y^3 + 10xy^2$ becomes

- $5xy^2(5xy + 2)$
- $5(5x^2y^3 + 2xy^2)$
- $5y^2(5x^2y + 2x)$
- $5xy^2(5xy + 2xy^2)$

A

Question No. 7

Simplify $(-5p^4)(-8p^3)$

- $40p^7$
- $40p^{12}$
- $-40p^7$
- $-40p^{12}$

A

Save & Next حفظ والتالي

Question No. 13

Perform this operation and express the answer in the simplest form.

$$\frac{3m + 1}{m - 4} - \frac{m + 9}{m - 4}$$

- $\frac{2m+10}{m-4}$
- $\frac{4m+10}{m-4}$
- 2
- $\frac{4m-8}{m-4}$



Let $U = \{-2, -1, 1, 2, 3, 4\}$, $A = \{-1, 2, 4\}$ and $B = \{-2, -1, 3\}$, then $A' \cap B =$

- \emptyset
- $\{-2, 3\}$
- $\{-2, -1, 3\}$
- $\{3\}$

B

Question No. 5

a^3 means that

- $a+a+a$
- $3a$
- $(3+3+3)a$
- $a \cdot a \cdot a$

D

Save & Next حفظ و التالي

HP Compaq LE1711

Question No. 15

Simplify: $\frac{\frac{2}{x-y} + \frac{1}{x+y}}{\frac{1}{x-y}}$

- $\frac{3x+y}{x^2-y^2}$
- $\frac{3x+y}{x-y}$
- $\frac{3x+y}{x+y}$
- $\frac{3x-y}{x+y}$

D

Save & Next حفظ و التالي

Question No. 25

The equation $-2x^2 + 13x - 15 = 0$ has

- two irrational roots
- one repeated root
- two nonreal complex roots
- two rational roots

D

Save & Next حفظ و التالي

Question No. 14

Find the sum $x + \frac{1}{x} - \frac{3}{x^2}$

- $\frac{x^3+x-3}{x^2}$
- $\frac{x^3-x+3}{x^2}$
- $\frac{x^3+x-3}{x}$
- $\frac{x^3+x-3}{3x^2}$

A

Save & Next حفظ والتالي

HP Compaq LE1711

Question No. 12

Factor completely $x^6 - y^6$

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

D

Question No. 6

The base of $-5p^4$ is

- 4
- 5
- p
- $-5p$

C

حفظ و التالي Save & Next

HP Compaq LE1711

Question No. 22

Simplify: $-i\sqrt{2} - 2 - (6 - 4i\sqrt{2}) - (5 - i\sqrt{2})$

- $13 + 4i\sqrt{2}$
- $-13 + 4i\sqrt{2}$
- $-4 + 4i\sqrt{2}$
- $-13 - 4i\sqrt{2}$

B

Save & Next. حفظ و التالي

Question No. 8

The expression xyz can be classified as a

- monomial
- binomial
- none of these
- trinomial

D

Save & Next حفظ واقتلي

Compaq LE1711

Question No. 9

Perform this division $(6m^2 + 13m - 15) \div (m + 3)$

- $m - 5$
- $6m + 5$
- $6m - 5 + \frac{4}{m-5}$
- $6m - 5$

D

Save & Next. حفظ والتالي

Compaq LE1711

Question No. 10

Which expression is equivalent to $(x-1)^2-4$?

- $(x-3)(x+1)$
- $(x-1-2)(x-1-2)$
- x^2-2x+1
- $(x-2)(x+2)$

A

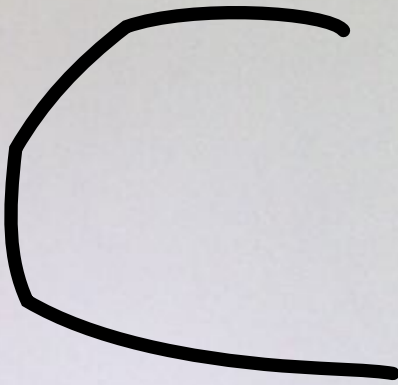
Save & Next حفظ و التالي

Compaq LE1711

Question No. 11

Factor $x^2 + 4x - 45$

- $(x - 9)(x + 5)$
- $(x + 9)(x + 5)$
- $(x + 9)(x - 5)$
- $(x + 1)(x - 45)$



Save & Next حفظ واقتلي

Compaq LE1711

Question No. 1

Determine the following union $\emptyset \cup \{1,2\} =$

- $\{1,2,\phi\}$
- $\{1\}$
- \emptyset
- $\{1,2\}$



Question No. 16

Write the expression in simplified radical form $\frac{6}{\sqrt{38}-6}$

- $3\sqrt{38}-18$
- $3\sqrt{38}+18$
- $\frac{3\sqrt{38}}{16}$
- $3\sqrt{38}$

B

Save & Next حفظ و التالي

Question No. 13

Find this product $\frac{6p-6}{p} \times \frac{2p^2}{9p-9}$

- $\frac{4p}{3}$
- $\frac{3}{4p}$
- $\frac{12p^3-12p^2}{9p^2-9p}$
- $\frac{54p^2+108p+54}{2p^3}$

A

Save & Next حفظ التالي

HP Compaq (E1711)

Question No. 19

Solve $75 - \frac{x}{7} = \frac{x}{8}$

- $\frac{1125}{2}$
- $\frac{1125}{56}$
- 5
- 280

D

Save & Next حفظ والتالي

Question No. 21

Simplify and write in the standard form of a complex number

$$\frac{8i}{4 + 9i}$$

- $\frac{72}{97} + \frac{32}{97}i$
- $-\frac{72}{65} - \frac{32}{65}i$
- $\frac{72}{65} - \frac{32}{65}i$
- $-\frac{72}{97} + \frac{32}{97}i$

A

Save & Next حفظ والتالي

Question No. 18

If a , b and c are real numbers with $a = b$, then

- $a + c = b + c$
- $a + c = -(b + c)$
- $a + c > b + c$
- $a + c < b + c$

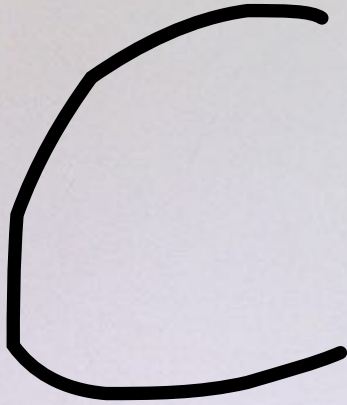
A

Save & Next حفظ و التالي

Question No. 20

Which one of the following equations is a conditional linear equation?

- $\frac{5}{3}x - \frac{4}{3} = 11$
- $-2(x+6) + 3x = x - 12$
- $x^2 - 1 = 0$
- $3(5x - 3) = 15x + 19$



Save & Next حفظ والتالي

Question No. 23

Find the quotient: $\frac{1-3i}{1+i}$

- 1-2i
- 1+2i
- 1+2i
- 1-2i

A

Save & Next حفظ و التالي

Question No. 19

Solve $\frac{x-15}{5} + \frac{x+9}{9} = x+4$

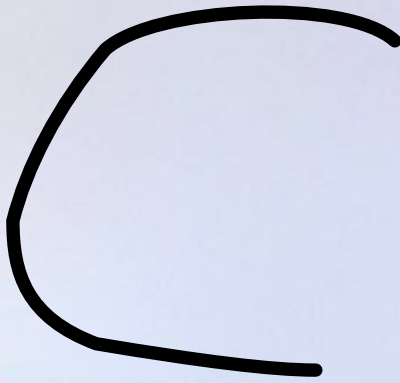
- $-\frac{270}{31}$
- $-\frac{216}{31}$
- $\frac{54}{31}$
- $\frac{144}{31}$

A

Question No. 10

Factor the following: $a^2 + ab - ac - cb$

- $(a + b)(a + c)$
- $(a - b)(a - c)$
- $(a + b)(a - c)$
- $(a - b)(a + c)$



Save & Next

HP LE1901w