Don't look back,
you're not going
that way.

تجميعات ميد اول

رياضيات (محلول)

2020-1441

Eng.dhoom

Total questions in exam: **25** | Answered: **0**

Question No. 25

Simplify the expression: $13 + 8 \div 2(8 - 2^2)$

- 29
- 3
- 33
- 27

Save & Next

Total questions in exam: **25** | Answered: **0**

Question No. 22

Factor $x^2 - 8x - 20$

- (x + 1)(x – 20)
- (x + 2)(x – 10)
- (x – 2)(x + 10)
- (x + 2)(x + 10)

Save & Next

Question No. 23

Write $z=3\left(\frac{2+3i}{i}\right)$ in the standard form $z=a+bi$

- z= 9-6i
- z= -9-6i
- z= 9+6i
- z= -9+6i

Save & Next

Question No. 24

The solution set of $(x + 5)^2 + 10 = 5$ is

- $\{-5 \pm \sqrt{5}\}$
- $\{5 \pm \sqrt{5}\}$
- $\{\pm 5\sqrt{5}\}$
- no real solutions

Save & Next

Total questions in exam: **25** | Answered: **0**

Question No. 20

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

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

Save & Next

Question No. 19

Suppose x is a real number. Evaluate the expression $-3(x-1)^0$

- -3
- -3 if $x \neq 0$
- 3 if $x \neq 0$
- -3 if $x \neq 1$

Save & Next

Total questions in exam: **25** | Answered: **0**

Question No. 18

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

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

Save & Next

Total questions in exam: **25** | Answered: **0**

Question No. 17

The base of $-5p^4$ is

- -5p
- 5
- 4
- p

Save & Next

Question No. 13

Which one of the following equations is a contradiction?

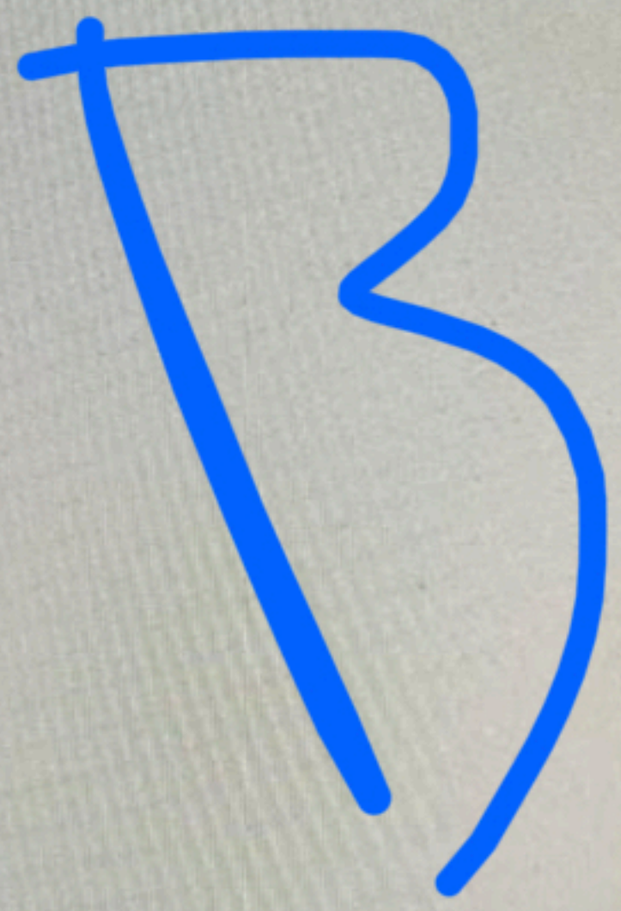
- $3(5x-3)=15x+19$
- $-2(x+8)+3x=x-16$
- $5x-4=11$
- $x^2-4=0$

Save & Next

Question No. 2

The simplified expression of $(-9)^{x/y}$ is positive if the values of x and y are equal to

- $x = 2,\ y = 2$
- $x = 8,\ y = 2$
- $x = 9,\ y = 3$
- $x = 6,\ y = 2$



Question No. 14

Perform the indicated operation $\frac{(2a^{-1}b^2c^{-2})^2}{(3^{-1}b)(2^{-1}ac^{-2})^3}$

- $\frac{24b^3c^2}{a^5}$
- $\frac{96b^3c^2}{a^5}$
- $\frac{96bc^2}{a^5}$
- $\frac{24bc^2}{a^5}$

Save & Next

HP Compaq LE1711

Question No. 15

Perform the indicated operations and Simplify. $\frac{a-b}{b-a} \div \frac{a^2+2ab+b^2}{a^2+ab}$

- $\frac{a+b}{a}$
- $\frac{-a+b}{a}$
- $\frac{a}{a+b}$
- $\frac{-a}{a+b}$

Save & Next

Question No. 3

$(5m+2)^2$

- $25m^2+20m+4$
- $25m^2+4$
- $5m^2+4$
- $5m^2+20m+4$

Question No. 16

The domain of $\frac{x+1}{(x+3)(2x-3)}$ is

- $R \setminus \{-3, 3\}$
- $R \setminus \{3, \frac{-3}{2}\}$
- $R \setminus \{-3, \frac{3}{2}\}$
- $R \setminus \{-3\}$

Save & Next

Question No. 8

Factor $4m^2 - 12m + 9$

- $(2m + 3)^2$
- $(2m - 7)(2m - 9)$
- $(2m - 3)^2$
- $(2m - 3)(2m + 3)$

Save & Next

Total questions in exam: **25** | Answered: **0**

Question No. 10

Solve: $2x^2 = x - 4$

- $\{\frac{1}{4}(1 \pm i\sqrt{31})\}$
- $\{\frac{1}{3}(1 \pm i\sqrt{31})\}$
- $\{\frac{1}{3}(-1 \pm i\sqrt{31})\}$
- $\{\frac{1}{4}(-1 \pm i\sqrt{31})\}$

Save & Next

Question No. 11

If A is any set then $A \cup \emptyset$ is equal to

- $\emptyset$
- 1
- A
- -1

Save & Next

Question No. 12

The solution set of the equation $6(x-2)=2-x$ is

- {2}
- 2
- {2, -2}
- ∅

Save & Next

Question No. 5

Simplify the expression by rationalizing the denominator: $\frac{3}{2+\sqrt{7}}$

- $4-\sqrt{7}$
- $2-\sqrt{7}$
- $-2+\sqrt{7}$
- $-4+\sqrt{7}$

Save & Next

Question No. 9

Simplify and write in the standard form of a complex number

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

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

Save & Next

Total questions in exam: **25** | Answered: **0**

Question No. 7

Using set notation, the elements belonging to the set: {x| x is a natural number less than 2} are

- {0}
- {∅}
- ∅
- {1}

Save & Next

Question No. 6

Simplify the expression: $-9y^0+(-9y)^0, y\neq 0$

- -2
- 8
- 0
- -8

Save & Next

Question No. 4

Factor: $(3u+5)^2 - 18(3u+5) + 81$

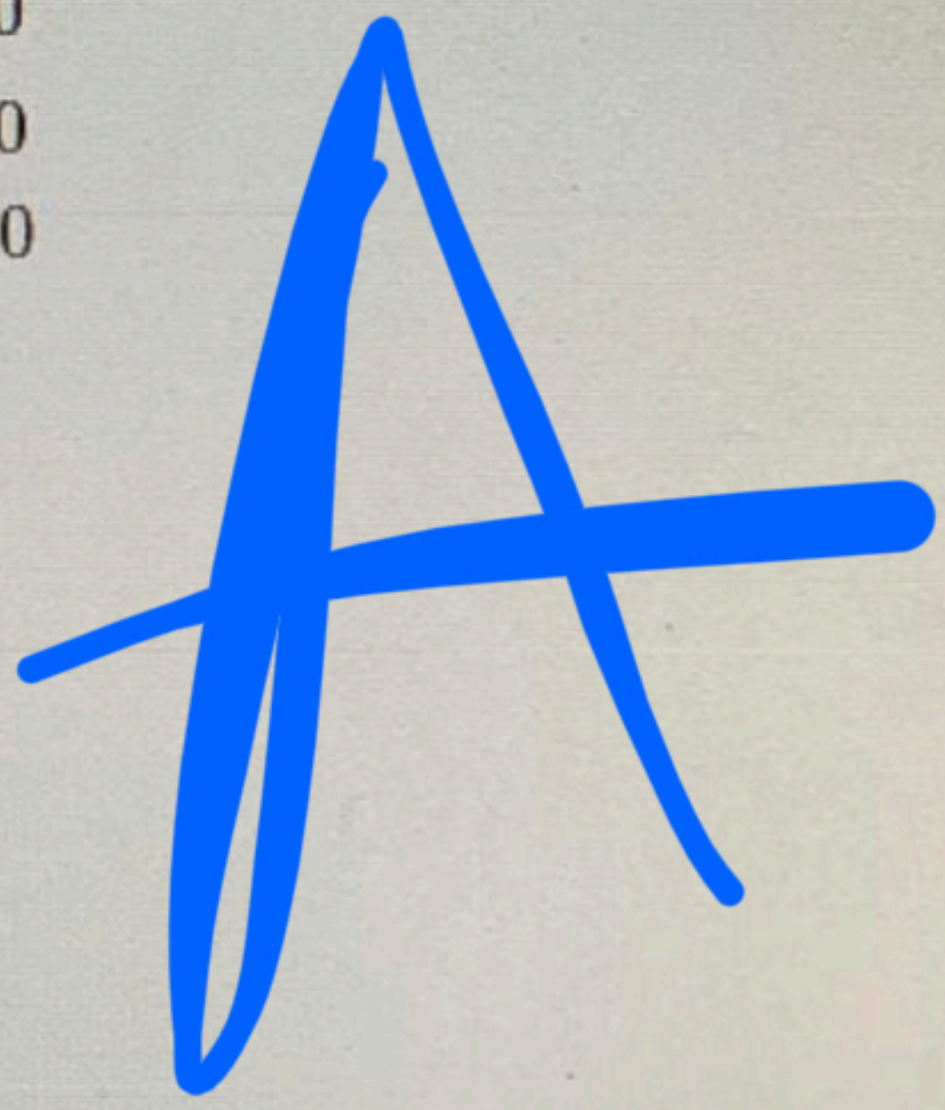
- $(3u+4)^2$
- $(3u+4)(3u-14)$
- $(3u+14)(3u-4)$
- $(3u-4)^2$

Save & Next

Question No. 1

Which of the following equations has solutions a and b?

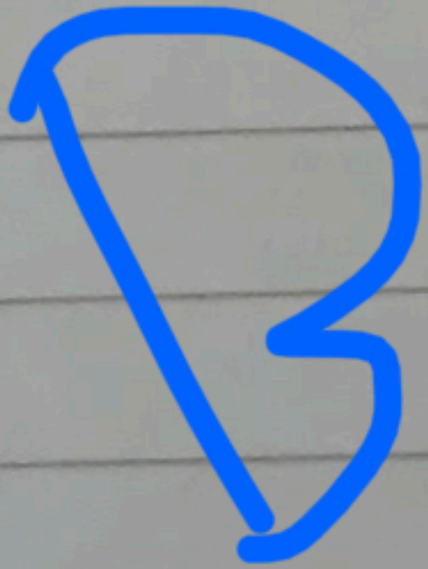
- $x^2 - (a+b)x + ab = 0$
- $x^2 + (a+b)x - ab = 0$
- $x^2 + (a+b)x + ab = 0$
- $x^2 - (a+b)x - ab = 0$



Save & Next

Solution Set $2(x+3) = 2x-6$

- All real number
- ϕ
- 1
- $\{2, 3\}$



$$\sqrt{x-4}\sqrt{x+4}$$

- $\sqrt{x-2}$

Total questions in exam: **25** | Answered: **10**

Que

Solving the equation $x^2 + ax - 1 = x$, for x, gives

- $\{\frac{a-1\pm\sqrt{a^2-2a-3}}{2}\}$
- $\{\frac{1-a\pm\sqrt{a^2-2a+5}}{2}\}$
- $\{\frac{1-a\pm\sqrt{a^2-2a-3}}{2}\}$
- $\{\frac{a-1\pm\sqrt{a^2-2a+5}}{2}\}$

Save &

MKCL OES

Total questions in exam 25 | Answered 9

Question No. 1

The equation $9x^2 - 6x = -1$ has

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

Save & Next

Question No. 12

Simplify $\dfrac{3\,m^{\frac{2}{3}} - 4\,m^{\frac{1}{3}}}{m^{\frac{-1}{3}}}$

- $3m^{\frac{1}{3}} - 4m^{\frac{2}{3}}$
- $3m - 4m^{\frac{2}{3}}$
- $3m - 4m^{\frac{1}{3}}$
- $3m^2 - 4m$

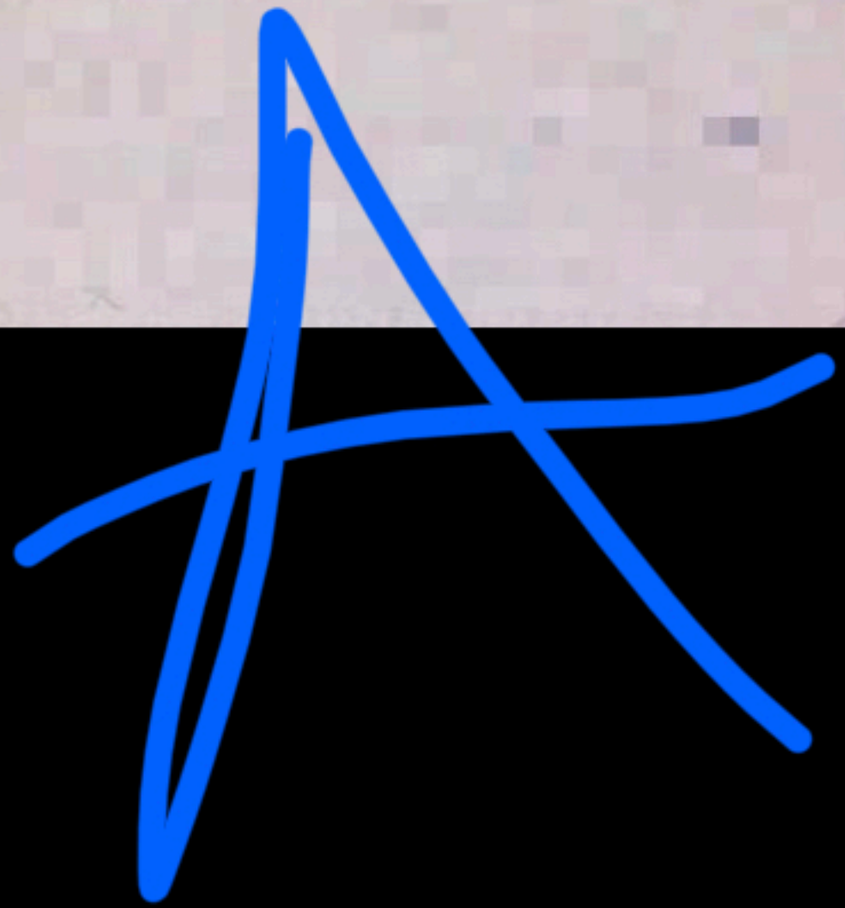
Question No. 2

Find $\frac{1}{4y} + \frac{3}{2y} - \frac{2}{3y}$

- $\frac{2}{12y}$
- $\frac{2}{9y}$
- $\frac{13}{12y}$
- $\frac{11}{12y}$

What is the degree of this polynomial: $2x^3 - 5x^4 - 10x + 9$

- 4
- 3
- 2
- 5



Total questions in exam: 25 | Answered: 24

Question No. 21

Find this quotient $\frac{x^2-15x+56}{x^2-6x-7} \div \frac{x+3}{x^2-9}$

- $\frac{(x+3)(x+4)}{3}$
- $\frac{(x-8)(x-3)}{x+1}$
- $4(x+1)$
- $\frac{6x}{x+2}$

Save & Next

uestion

Select the equation that illustrates the distributive property.

- $4 \times 1 = 4$
- $4 + 6 = 6 + 4$
- $4 + (6 + 7) = (4 + 6) + 7$
- $4 \times (6 + 7) = 4 \times 6 + 4 \times 7$

Which of the following is not a polynomial?

- $2x^3 - 7x^2 + 5x - 2$
- $x^5 + 5x^2 - x^{-1} + 1$
- $x^5 - x^3 + x^2 - x - \frac{-}{5}$
- $x^5 + 5x^3 - x + \sqrt{2}$

B

Factor completely $49a^2b - b^3$

- $b(7a + b)(7a - b)$
- $(7a + b^2)(7a - b)$
- Prime, doesn't factor
- $b(7a - b)^2$

جاني سؤال

اذا areal numbers a/ المسافة بين a و a-

الخيارات

2a

4a

-2a

-4a

Question No. 6

A⁻ A A⁺

The solution set of the equation $8x^3 = a^3$, for x, is

- $\{\frac{a}{2}, -\frac{a}{8} + \frac{a\sqrt{3}}{8}i, -\frac{a}{8} - \frac{a\sqrt{3}}{8}i\}$
- ϕ
- $\{\frac{a}{2}, -\frac{a}{4} + \frac{a\sqrt{3}}{4}i, -\frac{a}{4} - \frac{a\sqrt{3}}{4}i\}$
- $\{\frac{a}{2}\}$

Save & Next

$$8x^3 - a^3 = 0$$

$$2^3x^3 - a^3 = 0$$

$$(2x-a)(4x^2+2ax+a^2) = 0$$

$x = \frac{a}{2}$ | $a = 4$ $\quad b = 2a \quad c = a^2$

$$= \frac{-2a \pm \sqrt{4a^2 - 4\times4\times a^2}}{8}$$

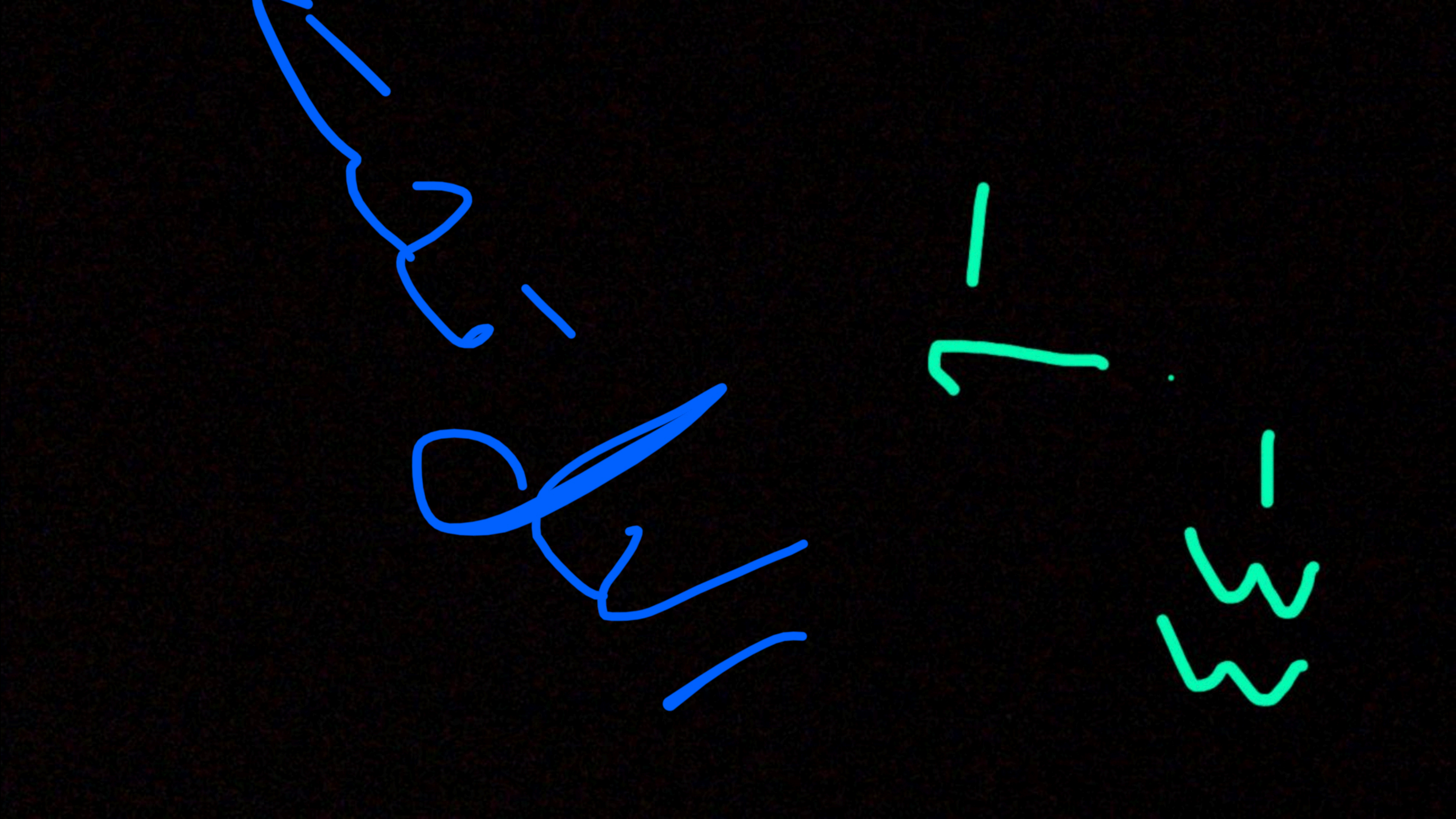
$$= \frac{-2a \pm \sqrt{4a^2 - 16a^2}}{8}$$

$$= \frac{-2a \pm \sqrt{-12a^2}}{8}$$

$$= \frac{-2a \pm 2\sqrt{3}i}{8}$$

$$= -\frac{a}{4} \pm \frac{\sqrt{3}}{4}i$$

حل تفصيلي للسوال الي فوق



$$\left((-1)\,i\right)^{33}$$

$$(-1)^{-33}\left(i\right)^{-33}$$

$$-1\left[-i\right]$$

$$i$$

$$\frac{33}{4} = i$$

حل السوال الي فوق

$$25x^2y^3 + 10xy^2$$

الحل :-

$$5xy^2(5xy + 2)$$

MKCL OES

Question No. 10

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

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

Question No. 13

The solution set of $x^2 - 6x = -5$ is

- $\{-1, -5\}$
- $\{1, -5\}$
- $\{1, 5\}$
- $\{-1, 5\}$

Question No. 25

Simplify $\dfrac{x^2 \times y^{\frac{5}{2}}}{\left(x^{\frac{1}{2}} \times y^{-1}\right)^2}$

- $x \cdot y^{\frac{1}{2}}$
- $x^{\frac{1}{2}} y^{\frac{1}{6}}$
- $x^{\frac{1}{2}} \cdot y^{-\frac{5}{2}}$
- $y \cdot x^{-\frac{1}{2}}$

Save & Next

10.65.7.215

MKCL OES

Total questions in exam: 25 | Answered: 12

Question No. 11

Compute $\left(\frac{a^{11/5}b^{2/3}}{a^{3/5}b^{11/3}}\right)^{3/4}\left(\frac{a^{1/2}b^{3/2}}{a^{3/4}b}\right)^{3}$

- ab
- $\frac{a^{3/4}}{b^{3/2}}$
- $\frac{b^{3/2}}{a^{3/4}}$
- 1

Save & Next

Question No. 8

The solution set of $4x^2 + 16x = 0$ is

- $\{4, 0\}$
- $\{4, 1\}$
- $\{-4, 0\}$
- $\{-4, 1\}$

Save & Next

CL OES

Math_Q

al questions in exam: **25** | Answered: **20**

estion No. 25

the equation $ax^2 - 6x + 9 = 0$ has one doubled (repeated) solution, then

a = 36

a = −1

a = −36

a = 1

Save & Next

Total questions in exam: 25 | Answered: 7

Math_Quiz1_Sem2_2020

Question No. 5

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

A⁻ A A⁺

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

C

Save & Next

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

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

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

Question No. 9

Find this quotient $\frac{4m}{m^2-18m+80} \div \frac{9m^2+90m}{m^2-18m+80}$

- $2(m+1)$
- $\frac{6m^2}{m+3}$
- $\frac{5m}{m+4}$
- $\frac{4}{9(m+10)}$

Save & Next

Total questions in exam: **25** | Answered: **11**

If one solution of $x^2 - 3x + c = 0$ is 2, then

- c = −3
- c = 2
- c = −2
- c = 0

Question No. 24

Let $x \in \mathbb{Z}$. Simplify the following expression $a = 3i^{132x^2+4x-3}$

- $a = 3i$
- $a = -3i$
- $a = -3$
- $a = 3$

MKCL OES

Math_Quiz

Total questions in exam: 25 | Answered: 4

Question No. 5

The equation $2x^2 - x + c = -1$ has two non-real complex solutions for x, if

- $c < -\frac{7}{8}$
- $c > -\frac{7}{8}$
- c is any real number
- $c > -\frac{9}{8}$

c) $> -\frac{7}{8}$

Save & Next

Question No. 26

Let $x \in \mathbb{R}$ and z be a complex number. Give the value of x that m

$$z = (3x - \sqrt{5}) + (x + 1)i - 2$$

- $x = \frac{2-\sqrt{5}}{3}$
- $x = -\frac{\sqrt{5}}{3}$
- $x = \frac{2+\sqrt{5}}{3}$
- $x = \frac{\sqrt{5}}{3}$

Question No. 25

The solution set of $z^2 + i^2 = 0$ is

- $S = \{-i\}$
- $S = \{+i\}$
- $S = \{-i, +i\}$
- $S = \{-1, +1\}$

Question No. 3

A⁻ A A⁺

The elements from $A = \{-8, -2, 0.5, \frac{10}{5}, \sqrt{25}, \sqrt{10}, \pi, 7\}$ that belong to the set of rational numbers are

- $\{-8, -2, 0.5, \frac{10}{5}, \sqrt{25}, \pi, 7\}$
- $\{-8, -2, 0.5, \frac{10}{5}, \sqrt{25}\}$
- $\{-8, -2, 0.5, \frac{10}{5}, \sqrt{25}, 7\}$
- $\{-8, -2, 0.5, \frac{10}{5}, \sqrt{25}, \sqrt{10}, 7\}$

Save & Next

Question No. 7

Simplify and write in the standard form of a complex number

$$\sqrt{-36}+\sqrt{25}$$

- $i\sqrt{11}$
- $5-6i$
- $5-36i$
- $5+6i$

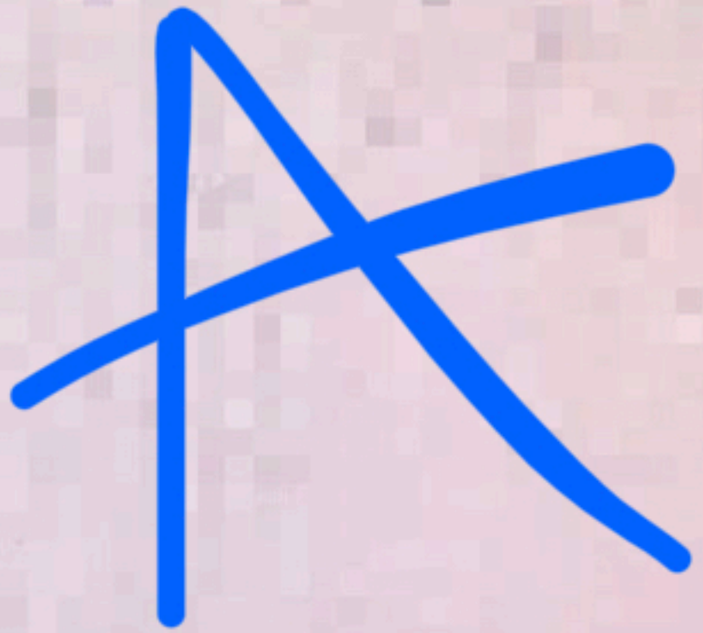
Save & Next

Question No.

A⁻

Which expression is equivalent to $16a^2 - 49b^2$?

- (4a– 7b)(4a+ 7b)
- (2a + 7b)(8a – 7b)
- (4a – 7b)(4a – 7b)
- (2a– 7b)(8a – 7b)



Question No. 16

Factor : $(4x-y)^3-125$

- $((4x-y)+5)((4x-y)^2-5(4x-y)+25)$
- $((4x-y)+5)((4x-y)^2-10(4x-y)+25)$
- $((4x-y)-5)((4x-y)^2+5(4x-y)+25)$
- $((4x-y)-5)((4x-y)^2+10(4x-y)+25)$