MCQ Q#3

Question No. 5

Let A = $\{-6, -12, -5, \sqrt{3}, 0, 2\text{II}, 3, \sqrt{12}\}$. The subset of all rational numbers of A is

- $\{-6, -12, -5, 0, 3\}$
- $\{-\sqrt{3}, 2\text{II}, \sqrt{12}\}$
- $\{-6, -12, -5, -\sqrt{3}, 0, 3, \}$
- $\{-6, 0, 3\}$

1

Save & Next

Simplify $\frac{x^{-1}+y^{-1}}{1-x^{-1}}$

- $\frac{x+1}{x-1}$
- $\frac{x+y}{y(x-1)}$
- $\frac{x+y}{x-1}$
- $\frac{x+y}{xy-1}$

C

INSTRUCTION: تعليمات Please choose the BEST answer from the given options for each question.

Question:

The **remainder** of the division $(x^4 + x^3 + x^2 + x + 1) \div (x - 1)$ is

Options:

- 5
- 2
- 4
- 3

A

Question No. 2

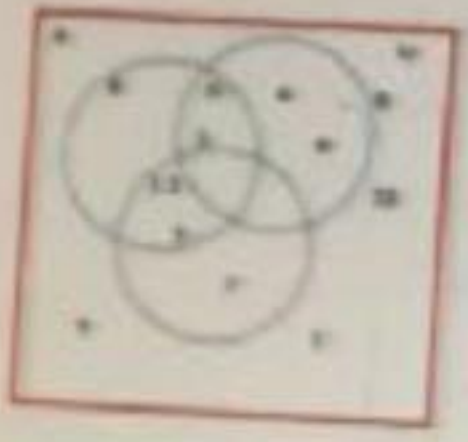
Use set notation, and write the elements belonging to the set
(x | x is a natural number less than 1)

- {0}
- {∅}
- {1}
- ∅

B

Question No. 1

Use the Venn diagram to determine $A \cup B$



- $A \cup B = \{4, 6, 8\}$
- $A \cup B = \{0, 1, 2, 3, 4, 5, 6, 8\}$
- $A \cup B = \{0, 2\}$
- $A \cup B = \{1, 3, 4, 5, 6, 8\}$

C

Question No. 9

Let $A = \{-6, -12, -5, \sqrt{3}, 0, 2\pi, 3, \sqrt{12}\}$. The subset of all rational numbers of A is

- $\{-6, -12, -5, 0, 3\}$
- $\{-\sqrt{3}, 2\pi, \sqrt{12}\}$
- $\{-6, -12, -5, -\sqrt{3}, 0, 3\}$
- $\{-6, 0, 3\}$

A

estion No. 25

The solution set of $-27x = x^3 - 12x^2$ is

- {0,3,-9}
- {0,3,9}
- {3,9}
- {-3,-9}

B

Question No. 19

Solving the equation $2AP-3rt=5Prt$ for P gives

- $P=\frac{3rt}{2A-5rt}$
- $P=\frac{2A-5Prt}{3rt}$
- $P=\frac{2A}{rt}$
- $P=\frac{2A-3P}{rt}$

A

Question No. 8

Which expression is a polynomial?

- $\sqrt{11}$
- $\sqrt{x}+x$
- $x^{-2}-1$
- $\frac{1}{x}+x$

A

Question No. 15

Simplify $\frac{(a+1)^{-1}-(a-1)^{-1}}{(a^2-1)^{-1}}$

- 2a
- 2
- -2
- -2a

C

Question No. 12

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

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

A

Perform the indicated operation: $(4x^2 - 3y)(4x^2 + 3y)$

- $16x^4 - 24x^2y + 9y^2$
- $16x^4 + 9y^2$
- $16x^4 - 24x^2y - 9y^2$
- $16x^4 - 9y^2$

D

Question No. 16

Simplify $\left(\frac{x^2y^{1/3}}{z^{1/9}}\right)^3\left(\frac{x^{-1/2}z^{1/4}}{y^{1/2}}\right)^2$

- $\frac{1}{x^5y^{2/3}z^{1/6}}$
- $x^5y^{2/3}z^{1/6}$
- $x^5z^{1/6}$
- $\frac{1}{x^5z^{1/6}}$

C

Question No. 11

Factor $25x^2 - 30x + 9$

- $(5x + 3)(5x - 3)$
- $(25x - 3)(x - 3)$
- $(5x + 1)(5x + 9)$
- $(5x - 3)^2$

D

Question No. 4

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

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

C

Question No. 13

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

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

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

B

Question No. 1

If $A=\{1,2,3,4,5\}$ then

A

- $\{1,4\} \subseteq A$
- $\{1\} \in A$
- $\{0,1\} \subseteq A$
- $1 \notin A$

Question No. 14

Write the expression in lowest term $\frac{(a-b)^2}{a^2-b^2}$

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

A

Question No. 11

Factor $12x^2 + 7x - 12$

- $(3x + 1)(4x - 12)$
- $(3x - 4)(4x + 3)$
- $(12x + 4)(x - 3)$
- $(3x + 4)(4x - 3)$

D

Question No. 1

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

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

B

Question No. 13

Find this quotient $\frac{a^2-b^2}{2a-2b} \div \frac{a+b}{8}$

- $\frac{a+b}{16}$
- 4
- $\frac{a+b}{8}$
- $\frac{(a-b)}{16}$

B

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

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

B

Question No. 14

Perform the operations: $\frac{5x+7}{5a^2x} - \frac{3x-2}{5a^2x}$

- $\frac{8x+7}{5a^2x}$
- $\frac{2x+9}{5a^2x}$
- $\frac{2x+5}{5a^2x}$
- $\frac{8x+5}{5a^2x}$

B

Question No. 5

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

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

B

Question No. 12

Factor the following polynomial : $4tx^3 + ytz - 4zt - tyx^3$

- $(x^3 - z)(4 - y)$
- $t(x^3 - z)(4 + y)$
- $t(x^3 - z)(4 - y)$
- $(tx^3 + z)(4t + yt)$

C

Question No. 3

Let U={1,2,3,4,5,6,7}, A={1,3,5,7}, and B={3,4,6}. Find (A∩ B)'

- {4,5,6,7}
- {1,2,4,5,6,7}
- {1,2,3,4}
- {3,4,6,7}

B

Question No. 4

Select the equation that illustrates the distributive property.

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

B

Question No. 17

The solution set of an identity equation is

- the set of some numbers that satisfy the equation
- the set of real numbers
- the set of natural numbers
- the empty set

B

Question No. 23

What are the factors of this quadratic equation?$8x^2 - 6x - 5 = 0$

- $(4x - 5)(2x + 1)$
- $(8x + 5)(x - 1)$
- $(x + 1)(8x - 5)$
- $(4x - 1)(2x + 5)$

A

Question No. 9

The quotient of $\frac{6m^3+7m^2-4m+2}{3m+2}$ is

- $2m^2+m+2$
- $2m^2+2m-2+\frac{6}{3m+2}$
- $2m^2-m+2$
- $2m^2+m-2+\frac{6}{3m+2}$

B

Question No. 17

Solve $(7x+2) - 4 = 8(x-9)$

- $x = -70$
- $x = -78$
- $x = -7$
- $x = 70$

D

Question No. 18

The equation $x-1=0$ is a

D

- quadratic equation
- cubic equation
- none of these answers
- linear equation

estion No. 16

$$\left(\frac{x^2 y^{1/3}}{z^{1/9}}\right)^3 \left(\frac{x^{-1/2} z^{1/4}}{y^{1/2}}\right)^2$$

Simplify

- $\frac{1}{x^5 z^{1/6}}$
- $x^5 z^{1/6}$
- $x^5 y^{2/3} z^{1/6}$
- $\frac{1}{x^5 y^{2/3} z^{1/6}}$

Select the correct property that describes the given equation.

$x + (y + 3) = x + (3 + y)$

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

Question No. 3

Given that $A = \{2,5\}$ and $B = \{7\}$ then

- $A \cap B = \{7\}$
- A and B are disjointsets
- $A \cup B = \{2,5\}$
- $B \subseteq A$

Question No. 2

The union $\{1, 2, 3, 5, 6, 7\} \cup \{4, 5, 6, 10\}$ is

- $\{1, 2, 3, 4, 5, 6, 7, 10\}$
- $\{5, 6\}$
- $\{1, 2, 3, 4, 6, 7, 10\}$
- $\emptyset$

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$^2(bca)^3(cab)^5 =$

$A \cap \emptyset = \emptyset$

$A \cup \emptyset = A$

$U' = \emptyset$

$\emptyset' = U$

$c + 2)^2 - 16$ is

INSTRUCTION: تعليمات Please choose the BEST answer from the given options for each question.

Question:

The **remainder** of the division $(x^4 + x^3 + x^2 + x + 1) \div (x - 1)$ is

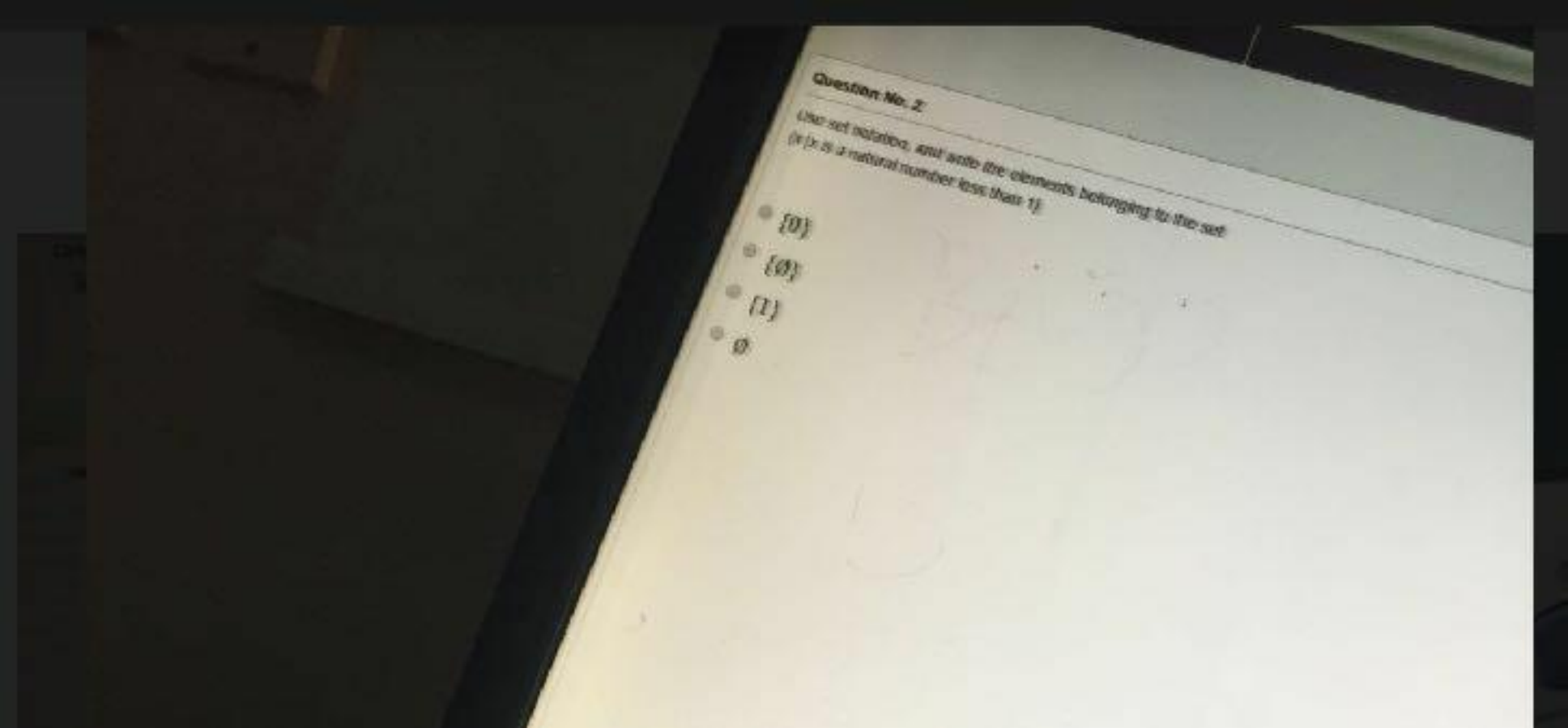
Options:

- 5
- 2
- 4
- 3

Question No. 3

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

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


Question No. 2
Use set notation, and write the elements belonging to the set
{x | x is a natural number less than 1}
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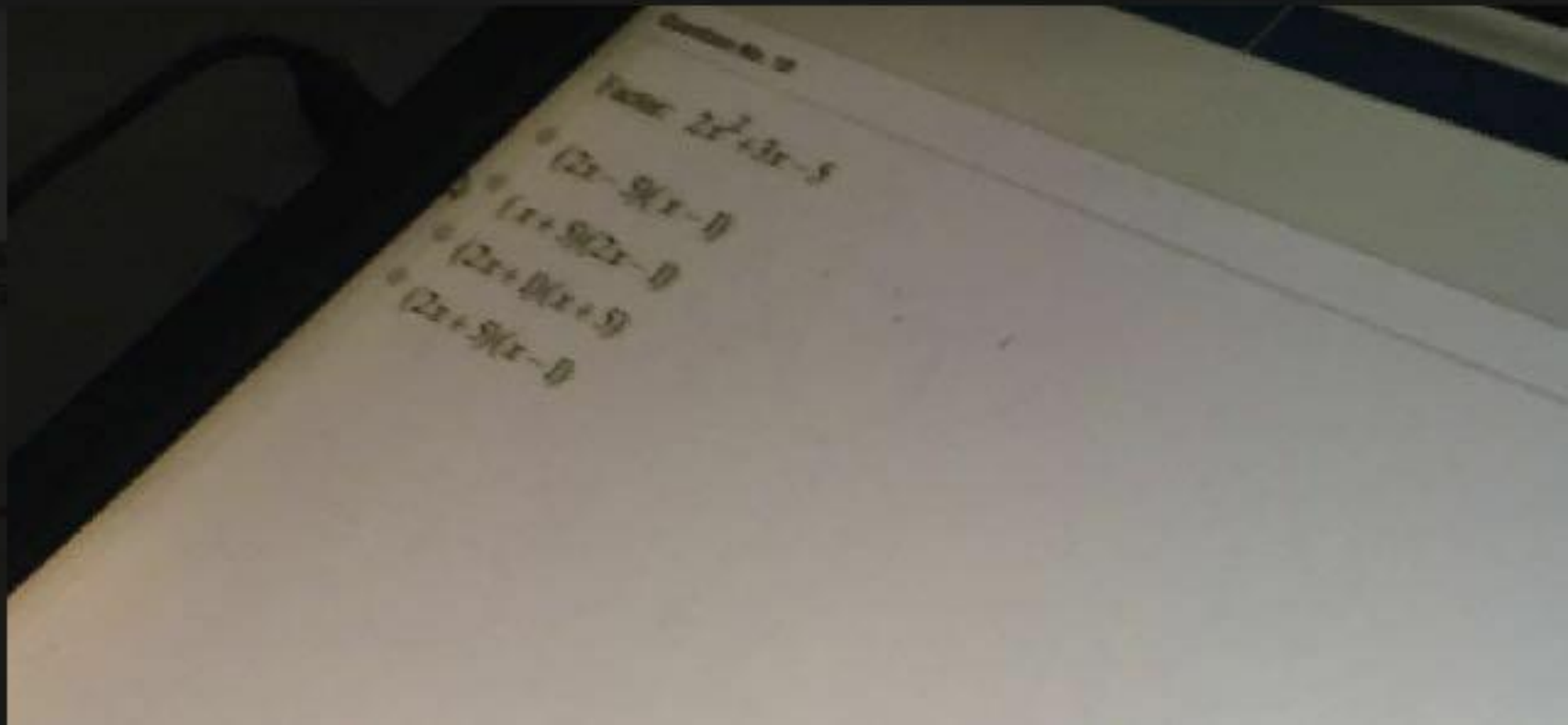
{Ø}
{1}
Ø



Question No. 19

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

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

Question No. 5

Let $A = \{-6, -12, -5, \sqrt{3}, 0, 2\pi, 3, \sqrt{12}\}$. The subset of all rational numbers of A is

- $\{-6, -12, -5, 0, 3\}$
- $\{-\sqrt{3}, 2\pi, \sqrt{12}\}$
- $\{-6, -12, -5, -\sqrt{3}, 0, 3\}$
- $\{-6, 0, 3\}$

estion No. 25

The solution set of $-27x = x^3 - 12x^2$ is

- {0,3,-9}
- {0,3,9}
- {3,9}
- {-3,-9}

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Question No. 19

Solving the equation 2AP-3rt=5Prt for P gives

- $P = \frac{3rt}{2A-5rt}$
- $P = \frac{2A-5Prt}{3rt}$
- $P = \frac{2A}{rt}$
- $P = \frac{2A-3P}{rt}$

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Question No. 8

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Next التالي

Question No. 15

Simplify $\frac{(a+1)^{-1}-(a-1)^{-1}}{(a^2-1)^{-1}}$

- 2a
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- -2
- -2a

Question No. 12

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

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

Question No. 7

Perform the indicated operation $(4x^2 - 3y)(4x^2 + 3y)$

- $16x^4 - 24x^2y + 9y^2$
- $16x^4 + 9y^2$
- $16x^4 - 24x^2y - 9y^2$
- $16x^4 - 9y^2$

Save & Next

Question No. 16

Simplify $\left(\frac{x^2y^{1/3}}{z^{1/9}}\right)^3\left(\frac{x^{-1/2}z^{1/4}}{y^{1/2}}\right)^2$

- $\frac{1}{x^5y^{2/3}z^{1/6}}$
- $x^5y^{2/3}z^{1/6}$
- $x^5z^{1/6}$
- $\frac{1}{x^5z^{1/6}}$

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Question No. 11

Factor $25x^2 - 30x + 9$

- $(5x+3)(5x-3)$
- $(25x-3)(x-3)$
- $(5x+1)(5x+9)$
- $(5x-3)^2$

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Question No. 4

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

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

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Question No. 13

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

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

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

Question No: 2

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

- {0}
- {ø}
- {1}
- ø

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Question No. 3

If $A=\{1,2,3,4,5,6\}$ then

- $\{1,4\} \subseteq A$
- $\{1\} \in A$
- $\{0,1\} \subseteq A$
- $1 \notin A$

Save & Next حفظ والتالي

Question No. 1

Use the Venn diagram to determine $A \cup B$

- $A \cup B = \{4, 6, 8\}$
- $A \cup B = \{0, 1, 2, 3, 4, 5, 6, 8\}$
- $A \cup B = \{0, 2\}$
- $A \cup B = \{1, 3, 4, 5, 6, 8\}$

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Question No. 23

What are the factors of this quadratic equation?$8x^2 - 6x - 5 = 0$

- $(4x - 5)(2x + 1)$
- $(8x + 5)(x - 1)$
- $(x + 1)(8x - 5)$
- $(4x - 1)(2x + 5)$

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Question No. 11

Factor $12x^2 + 7x - 12$

- $(3x + 1)(4x - 12)$
- $(3x - 4)(4x + 3)$
- $(12x + 4)(x - 3)$
- $(3x + 4)(4x - 3)$

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Question No. 21

The value of $\frac{\sqrt{-40}}{\sqrt{-4}}$ is

- 10
- $\sqrt{10}\,i$
- $-10\,i$
- $\sqrt{10}$

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Question No. 13

Find this quotient $\frac{a^3-b^2}{2a-2b} \div \frac{a+b}{8}$

- $\frac{a+b}{16}$
- 4
- $\frac{a+b}{8}$
- $\frac{(a-b)}{16}$

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Simplify $\frac{x^{-1}+y^{-1}}{1-x^{-1}}$

- $\frac{x+1}{x-1}$
- $\frac{x+y}{y(x-1)}$
- $\frac{x+y}{x-1}$
- $\frac{x+y}{xy-1}$

Question No. 12

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

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

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Question No. 3

Let $U = \{-2, -1, 0, 1, 2, 3, 4\}$, $A = \{0, 1, 2, 4\}$ and $B = \{-2, -1, 0, 3\}$. Then $A' \cap B =$

- $\{3\}$
- $\{-2, 3\}$
- $\{-2, -1, 0, 3\}$
- $\emptyset$

Save & Next

Question No. 14

Perform the operations: $\frac{5x+7}{5a^2x} - \frac{3x-2}{5a^2x}$

- $\frac{8x+7}{5a^2x}$
- $\frac{2x+9}{5a^2x}$
- $\frac{2x+5}{5a^2x}$
- $\frac{8x+5}{5a^2x}$

Question No. 16

Simplify $\left(\frac{x^2 y^{1/3}}{z^{1/9}}\right)^3 \left(\frac{x^{-1/2} z^{1/4}}{y^{1/2}}\right)^2$

- $\frac{1}{x^5 z^{1/6}}$
- $x^5 z^{1/6}$
- $x^5 y^{2/3} z^{1/6}$
- $\frac{1}{x^5 y^{2/3} z^{1/6}}$

Question No. 25

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

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

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Question No. 1

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

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

ve & Next حفظ والتالي

Question No. 5

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

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

End Test

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Maths_Sem1_Quiz-1_20

Question No. 12

Factor the following polynomial : $4tx^3 + ytz - 4zt - tyx^3$

- $(x^3 - z)(4 - y)$
- $t(x^3 - z)(4 + y)$
- $t(x^3 - z)(4 - y)$
- $(tx^3 + z)(4t + yt)$

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Maths_Sem1_C

Question No. 3

Let U={1,2,3,4,5,6,7}, A={1,3,5,7}, and B={3,4,6}. Find (A∩ B)'

- {4,5,6,7}
- {1,2,4,5,6,7}
- {1,2,3,4}
- {3,4,6,7}

End Test

Question No. 12

Factor the following polynomial : $4tx^3 + ytz - 4zt - tyx^3$

- $t(x^3 - z)(4 + y)$
- $(x^3 - z)(4 - y)$
- $(tx^3 + z)(4t + yt)$
- $t(x^3 - z)(4 - y)$

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Question No. 4

Select the equation that illustrates the distributive property.

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

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Question No. 12

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

- $\frac{54p^2+108p+54}{2p^2}$
- $\frac{1}{4p}$
- $\frac{12p^3-12p^2}{9p^2-9p}$
- $\frac{4p}{3}$

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Question No. 3

Let $U=\{1,2,3,4,5,6,7\}$, $A=\{1,3,5,7\}$, and $B=\{3,4,6\}$. Find $(A \cap B)'$

- $\{4,5,6,7\}$
- $\{1,2,4,5,6,7\}$
- $\{3,4,6,7\}$
- $\{1,2,3,4\}$

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Question No. 2

Use set notation, and write the elements belonging to the set
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$x + (y + 3) = x + (3 + y)$

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Question No. 17

The solution set of an identity equation is

- the set of some numbers that satisfy the equation
- the set of real numbers
- the set of natural numbers
- the empty set

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Maths_Sem1_C

Question No. 3

Let U={1,2,3,4,5,6,7}, A={1,3,5,7}, and B={3,4,6}. Find (A∩ B)'

- {4,5,6,7}
- {1,2,4,5,6,7}
- {1,2,3,4}
- {3,4,6,7}

End Test

Question No. 9

The quotient of $\frac{6m^3+7m^2-4m+2}{3m+2}$ is

- $2m^2+m+2$
- $2m^2+2m-2+\frac{6}{3m+2}$
- $2m^2-m+2$
- $2m^2+m-2+\frac{6}{3m+2}$

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Question No. 18

The equation x-1=0 is a

- quadratic equation
- cubic equation
- none of these answers
- linear equation

Save & Next حفظ والتالي

Write the expression in lowest term $\frac{(a-b)^2}{a^2-b^2}$

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

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Maths_Sem1_Quiz-

Question No. 17

Solve (7x+2) - 4 = 8 (x-9)

- x = -70
- x = -78
- x = -7
- x = 70

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HP LE1901w

Question No. 13

If $f(x) = \frac{3}{x-2}$ and $g(x) = \frac{4}{x+5}$. Determine the domain of the sum of $f(x)$ and $g(x)$.

- $x \in (-\infty, \infty)$
- $x \in (-\infty, -5) \cup (-5, 2) \cup (2, \infty)$
- $x \in (-\infty, -5) \cup (2, \infty)$
- $x \in (-5, 2)$

Save & Next

The quotient of $\frac{6m^3+7m^2-4m+2}{3m+2}$ is

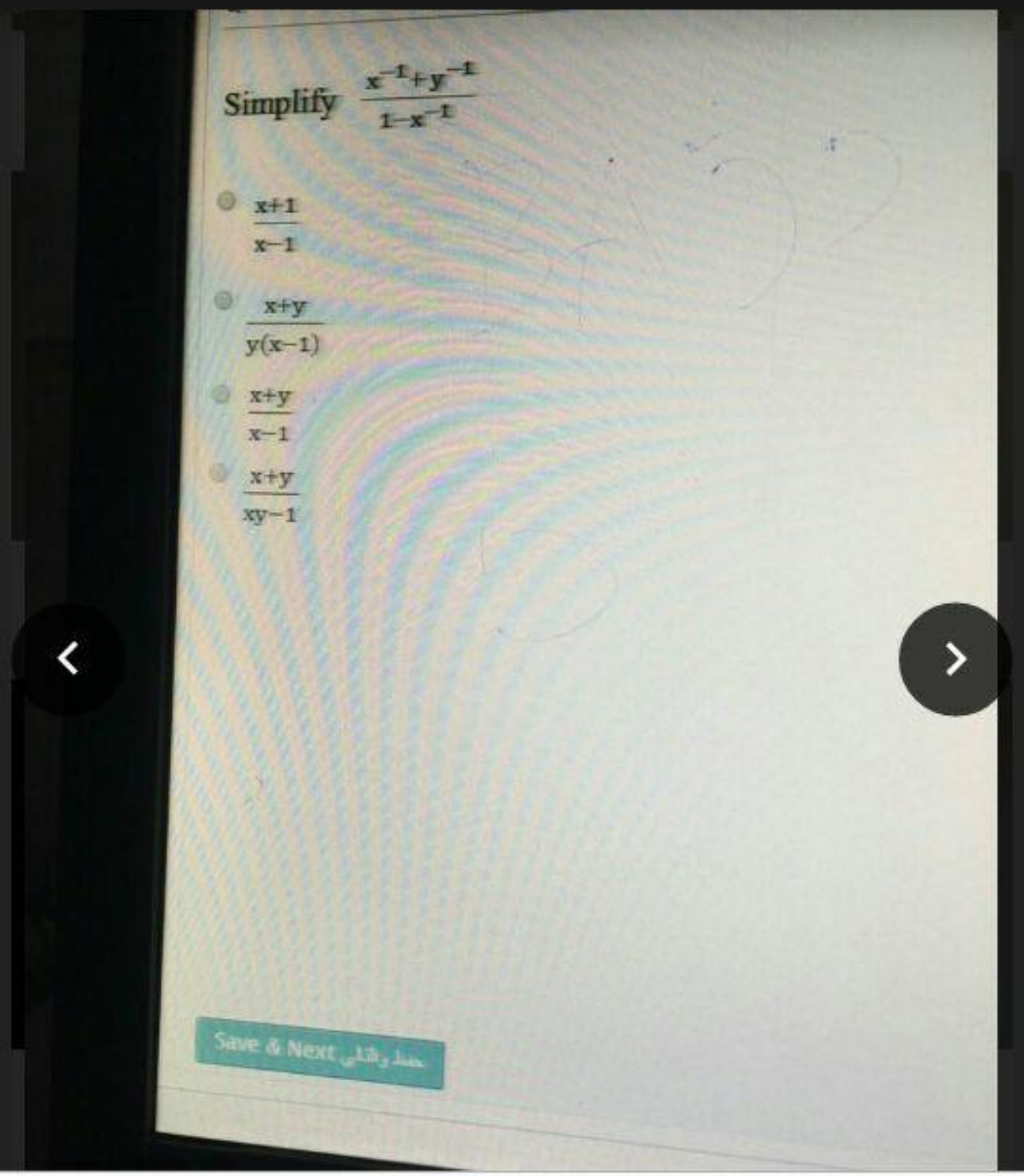
- $2m^2+2m-2+\frac{6}{3m+2}$
- $2m^2+m+2$
- $2m^2-m+2$
- $2m^2+m-2+\frac{6}{3m+2}$

Save & Next

Question No. 5

Simplify: $\frac{x^4-1}{(x^2+1)(x-1)}$

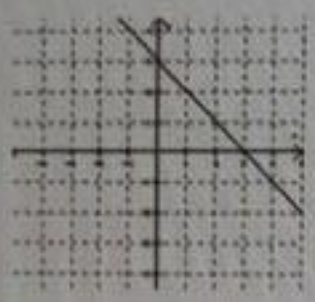
- $\frac{1}{x+1}$
- x^2+1
- $x+1$
- $\frac{1}{x^2+1}$



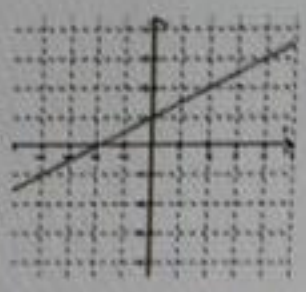
Question No. 9

Which line has a negative slope?

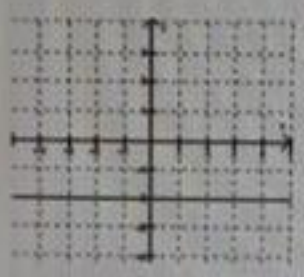
I



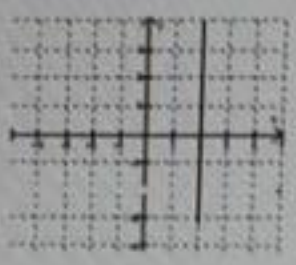
II



III



IV



- II
- I
- IV
- III

Save & Next

Question No. 29

Perform the indicated operation. $(7-3i) \div (5-2i)$

- $\frac{41}{29} - i$
- $1 - \frac{1}{29}i$
- $\frac{41}{29} - \frac{1}{29}i$
- $\frac{7}{5} + \frac{3}{2}i$

Save & Next

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Question No. 9

The quotient of $\frac{6m^3+7m^2-4m+2}{3m+2}$ is

- $2m^2+m-2+\frac{6}{3m+2}$
- $2m^2+2m-2+\frac{6}{3m+2}$
- $2m^2+m+2$
- $2m^2-m+2$

Save & Next حفظ والتالي

Question No. 6

The base of $-5p^4$ is

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

Save & Next حفظ والتالي

$11+8\div 2(8-2^2) =$

✓ [27] , 12 , 32 , 21

x+1/x

ploynomi of degree 1
plonomyal of degree 3
polynomyal of degree 2
not polynomial
🔴🔴🔴🔴🔴

i^16 =
🔴🔴🔴🔴🔴
factor
16x^4-1
🔴🔴🔴🔴🔴
factor x^6+125
🔴🔴🔴🔴🔴
simplyfiy (3ab^-2)^3 (3ab^-3/a^-2)^-2
🔴🔴🔴🔴🔴🔴
في سؤال انو اذا كانت اكس ناتشورال نمبر اقل من الواحد
حيكون الجواب *فاي بدون اقواس *
🔴🔴🔴🔴🔴
simplify (-16a^4/b^4)^1/4

Real Number (الأعداد الحقيقية)

جميع الأعداد ما عدا ز

Rational number (أعداد نسبية)

عبارة عن

① الأعداد اللي تخرج من الجذر

$\sqrt{16} = 4$ ، $\sqrt{25} = 5$

② الكسور: $\frac{11}{7}$ ، $\frac{-5}{9}$ ، $\frac{4}{9}$

Natural أعداد طبيعية

1, 2, 3 ...

Whole أعداد كلية

0, 1, 3 ...

Integers أعداد صحيحة

-2, -1, 0

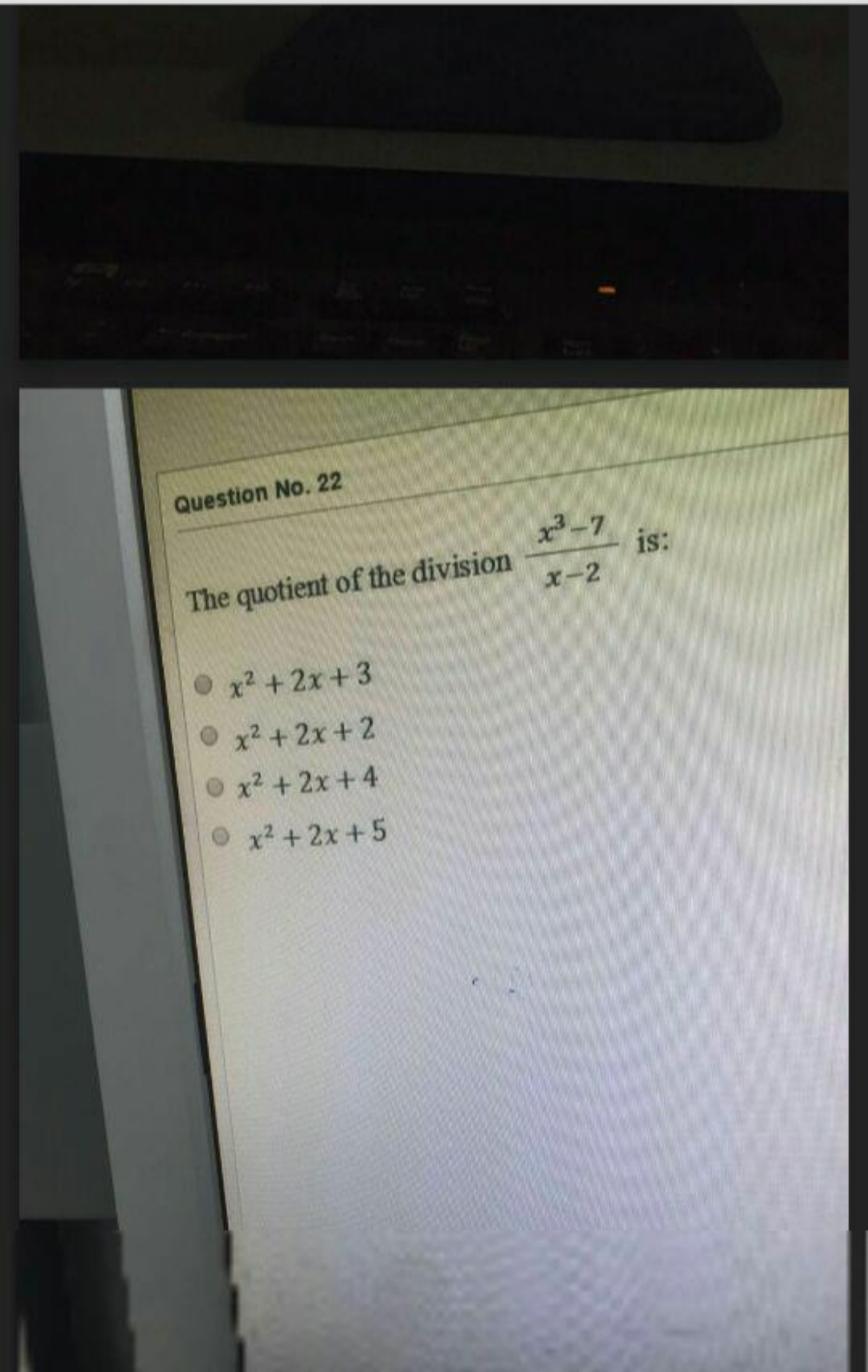
صفر وموجب وسالب

Irrational numbers (أعداد غير نسبية)

عبارة عن

$\sqrt{15}$ ، $\sqrt{2}$ ، $\sqrt{3}$ ، π ، $\frac{\pi}{4}$

0,254327... ← يعني اللي بعد الفاصلة أعداد كتيره غير محدودة.



Question No. 22

The quotient of the division $\frac{x^3-7}{x-2}$ is:

- x^2+2x+3
- x^2+2x+2
- x^2+2x+4
- x^2+2x+5

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Maths_Sem1_Qui

Question No. 23

Use the quadratic formula to solve this equation:

$$4x^2 - 3x + 3 = 0$$

- $x = \frac{3 \pm i\sqrt{39}}{8}$
- $x = \frac{-3 \pm \sqrt{39}}{8}$
- $x = \frac{3 \pm \sqrt{39}}{4}$
- $x = \frac{3 \pm \sqrt{39}}{8}$

Save & Next जतन व पुढील

DELL

Click on the question number to solve it.

Q001 Q002 Q003 Q004 Q005 Q006 Q007 Q008 Q009 Q010 Q011 Q012 Q013 Q014 Q015

INSTRUCTION: تعليمات Please choose the BEST answer from the given options for each question.

Question:

The solution set of the equation $x^{\frac{2}{2}} = 8$ is

Options:

- {8}
- {−4}
- {4}
- {2}

Submit Answer

INSTRUCTION: تعليمات Please choose the BEST answer from the given options

Question:

The quotient of the division $\frac{x^2-1}{x-4}$ is:

Options:

- $x^2+4x+13$
- $x^2+4x+16$
- $x^2+4x+15$
- $x^2+4x+14$

تسليم الإجابة
Submit Answer

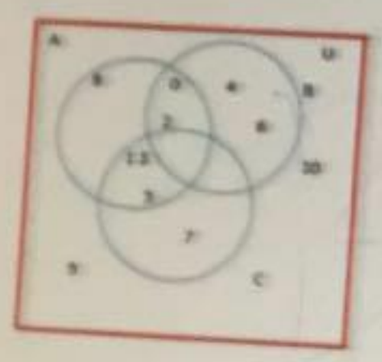
Question No. 10

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

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

Question No. 1

Use the Venn diagram to determine $A \cup B$



- A U B = {4, 6, 8}
- A U B = {0, 1, 2, 3, 4, 5, 6, 8}
- A U B = {0, 2}
- A U B = {1, 3, 4, 5, 6, 8}

Save & Next حفظ والتالي

Question No: 2

Use set notation, and write the elements belonging to the set
{x /x is a natural number less than 1}

- {0}
- {Ø}
- {1}
- Ø

Save & Next حفظ والتالي

Question No. 2

Let U = {−2, −1,1,2,3,4}, A = {−1,2,4} and B = {−2, −1,3}, then A′∩B =

- {3}
- {−2,3}
- {−2, −1,3}
- ∅

Save & Next حفظ والتالي

Question No. 4

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

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

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Question No. 5

Let $A = \{-6, -12, -5, -\sqrt{3}, 0, 2\text{II}, 3, \sqrt{12}\}$. The subset of all rational numbers of A is

- $\{-6, -12, -5, 0, 3\}$
- $\{-\sqrt{3}, 2\text{II}, \sqrt{12}\}$
- $\{-6, -12, -5, -\sqrt{3}, 0, 3,\}$
- $\{-6, 0, 3\}$

Save & Next حفظ والتالي

Question No. 14

Simplify the expression by rationalizing the denominator $\frac{4}{3+\sqrt{11}}$

- $-6+2\sqrt{11}$
- $12+4\sqrt{11}$
- $-6-2\sqrt{11}$
- $12-4\sqrt{11}$

Save & Next حفظ والتالي

Math Sem2 Q1 2015-16

Question No. 6

The base of $-5p^4$ is

- -5p
- 5
- p
- 4

Save & Next حفظ والتالي

Question No. 7

Perform the indicated operation $(4x^2 - 3y)(4x^2 + 3y)$

- $16x^4 - 24x^2y + 9y^2$
- $16x^4 + 9y^2$
- $16x^4 - 24x^2y - 9y^2$
- $16x^4 - 9y^2$

Save & Next حفظ والتالي

Question No. 17

The solution set of an identity equation is

- the set of some numbers that satisfy the equation
- the set of real numbers
- the set of natural numbers
- the empty set

Save & Next حفظ والتالي

The quotient of $\frac{6m^3+7m^2-4m+2}{3m+2}$ is

- $2m^2+2m-2+\frac{6}{3m+2}$
- $2m^2+m+2$
- $2m^2-m+2$
- $2m^2+m-2+\frac{6}{3m+2}$

Save & Next حفظ والتالي

Question No. 11

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

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

Save & Next حفظ والتالي

Question No. 8

The degree of the polynomial $2x^2(x^2-3x+2)$ is

- 1
- 4
- 2
- 3

Save & Next حفظ والتالي

Question No. 12

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

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

Save & Next حفظ والتالي

$$\left(\frac{a}{b^2}\right)^{-3} - \frac{b^{-2}}{a^{-3}}$$

$$\frac{a^{-3}}{b^{-6}} - \frac{b^{-2}}{a^{-3}}$$

$$\frac{b^6}{a^3} \quad \frac{a^3}{b^2}$$

$$\frac{b^8 - a^6}{a^3 b^2} = \frac{(b^4)^2 - (a^3)^2}{a^3 b^2} = \frac{(b^4 - a^3)(b^4 + a^3)}{a^3 b^2}$$

$$\sqrt[8]{(z-x)^8}$$

Question No: 13

Simplify $\frac{x^2-6x+9}{x^2-9}$

- $\frac{x-3}{x-9}$
- $\frac{x+3}{x-3}$
- $\frac{x-6}{x-9}$
- $x-3$
- $\frac{x-3}{x+3}$

Save & Next حفظ والتالي

Question No. 15

Simplify $\dfrac{(a+1)^{-1}-(a-1)^{-1}}{(a^2-1)^{-1}}$

- 2a
- 2
- -2
- -2a

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

$$= \frac{2p^2(6p-6)}{p(9p-9)}$$

$$= \frac{12p^3-12p^2}{9p^2-9p}$$

عنوان الدرس ..... اليوم ..... التاريخ / / ١٤

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

$$= \frac{6(p-1)}{1} \times \frac{2p}{9(p-1)} = \frac{4p}{3}$$

Simplify $\dfrac{x^{-1}+y^{-1}}{1-x^{-1}}$

- $\dfrac{x+1}{x-1}$
- $\dfrac{x+y}{y(x-1)}$
- $\dfrac{x+y}{x-1}$
- $\dfrac{x+y}{xy-1}$

$$\frac{15 + x - 6x^2}{6x^2 - 19x + 15}$$

$$-i^{-33}$$

a) i

b) $-i$

c) -1

d) 1

$$\frac{x^3}{6x^3} = \frac{1}{6}$$

$$\left(\frac{x^2 y^{\frac{1}{3}}}{z^{\frac{1}{3}}}\right)^3 \left(\frac{x^{\frac{1}{3}} z^{\frac{1}{4}}}{y^{\frac{1}{2}}}\right)^2$$

$$\left(\frac{x^6 y}{z}\right)\left(\frac{x^{\frac{2}{3}} z^{\frac{1}{2}}}{y^{\frac{1}{2}}}\right)$$

$$\frac{x^6 y\, x^{\frac{2}{3}} z^{\frac{1}{2}}}{z y} = \frac{x^{6+\frac{2}{3}}}{z^{\frac{1}{2}}} = \frac{x^{\frac{20}{3}}}{z^{\frac{1}{2}}}$$

$A = \{1, 2, 3, 4, 5, 6\}$

1) $\{1, 4\} \subseteq A$

2) $\{0, 1\} \not\subseteq A$

3) $\{2\} \in A$

4) $\{1, 3\} \notin A$

$$(x+3)^{-\frac{2}{5}} - (x+3)^{\frac{3}{5}}$$

$$\frac{p^{-1} - q^{-1}}{(pq)^{-1}}$$

(a) $q - p$

(b) pq

(c) $p + q$

(d) $p - q$

(7)

$$m+3 \;\overline{)\; 6m^2+13m-15}$$

$-8m + 15$

$-5m$

$$18n^{4/3} - 12n^{1/3}$$

(a) $6n^{\frac{1}{3}}(3n^2 - 2n)$

(b) $6n^{\frac{1}{3}}(3n^2 - 2)$

(c) $6n^{\frac{4}{3}}(3 - 2n)$

(d) $6n^{\frac{1}{3}}(3n - 2)$

A ∩ ∅

Question No. 9

The quotient of $\frac{6m^3+7m^2-4m+2}{3m+2}$ is

- $2m^2+m+2$
- $2m^2-m+2$
- $2m^2+m-2+\frac{6}{3m+2}$
- $2m^2+2m-2+\frac{6}{3m+2}$

Save & Next حفظ و التالي

$$\frac{x-2xy+y}{x+y} \div \frac{4x+4y}{2x+2x}$$

$$\frac{(x-y)}{4x} \quad (-1)$$

$$\frac{(x-y)}{x+y} \quad (-)$$

$$\frac{x+y}{x-y} \quad (-)$$

$$x \quad (-)$$

Question No. 9

The quotient of $\frac{6m^3+7m^2-4m+2}{3m+2}$ is

- $2m^2+m+2$
- $2m^2-m+2$
- $2m^2+m-2+\frac{6}{3m+2}$
- $2m^2+2m-2+\frac{6}{3m+2}$

Save & Next حفظ والتالي

Question No. 8

The expression $y^3 - 1$ can be classified as a

- binomial
- none of these
- monomial
- trinomial

Save & Next

جاني بالإختبار

$$\frac{3}{(x+3)^5} - \frac{2}{(x+3)^5}$$

$$\frac{1}{(a+1)} - \frac{1}{(a-1)} \div \frac{1}{(a^2-1)}$$

بالتحليل

$$\frac{(a-1)-(a+1)}{(a+1)(a-1)} \times \frac{(a+1)(a-1)}{1}$$

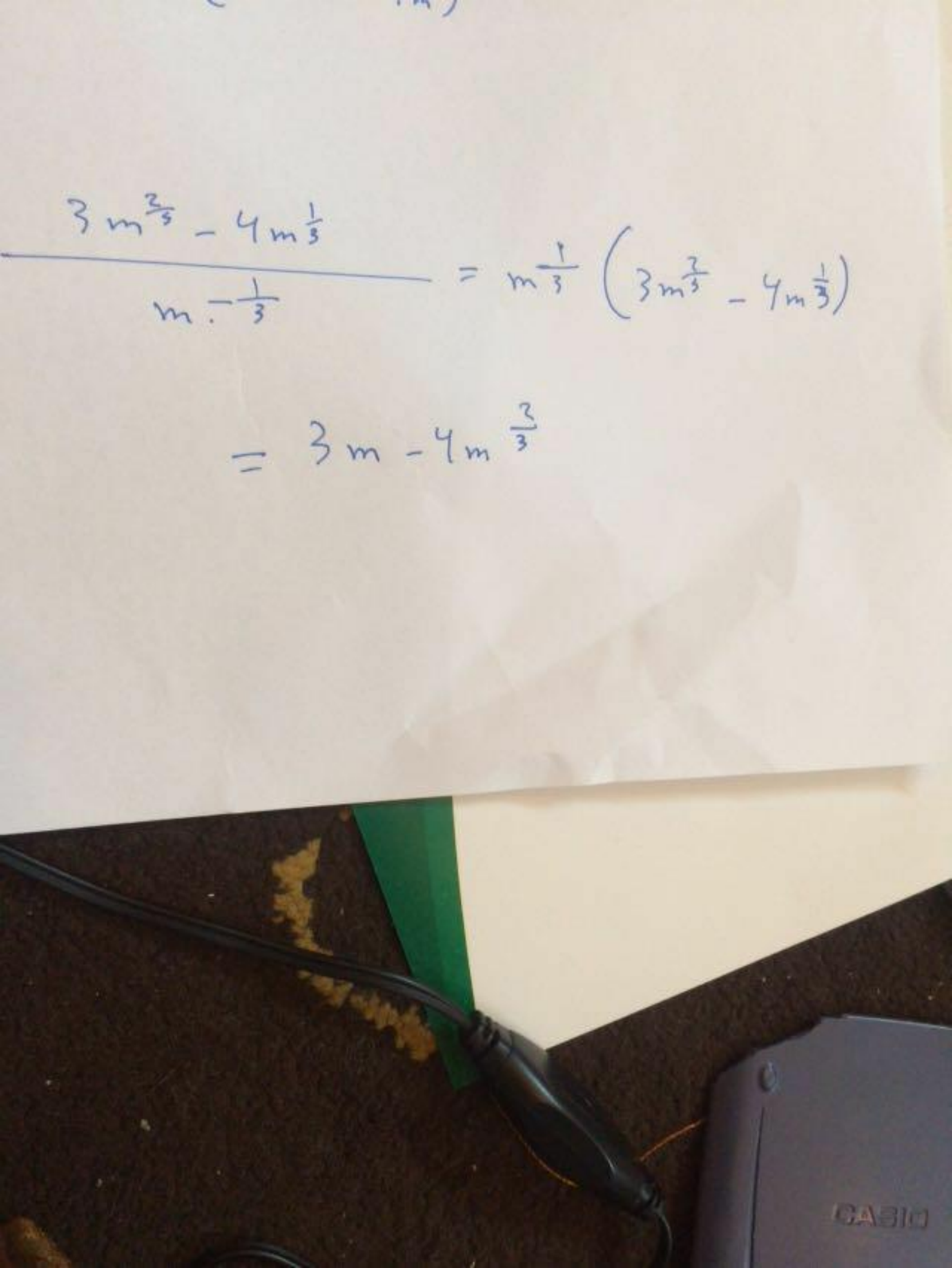
$$\frac{a-1-a-1}{1} = \boxed{-2}$$

$$\frac{2x^2+7x-4}{5x^2+20x}$$

$$= \frac{(\quad)(\quad)}{\quad}$$

$$\frac{3m^{\frac{2}{3}} - 4m^{\frac{1}{3}}}{m^{-\frac{1}{3}}} = m^{\frac{1}{3}}\left(3m^{\frac{2}{3}} - 4m^{\frac{1}{3}}\right)$$

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



$$\left(\frac{x^2 y^{1/3}}{z^{\frac{1}{3}}}\right)^3 \left(\frac{x^{1/3} z^{1/4}}{y^{1/2}}\right)^2$$