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No Work – No Grade

Question 1

Solve the following equation for a

1- $\sqrt{3a} = -6$

2- $(a-4)^2 = 49$

3- $a^2 = 4a + 5$

4- $5a^2 + 14a = 3$

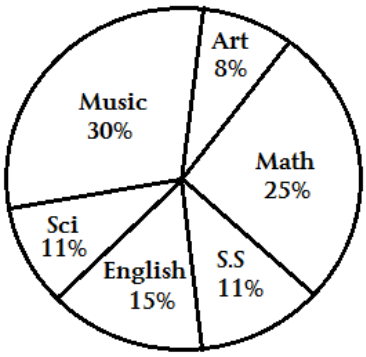
5- $\sqrt{4a+5} = a - 4$

6- $3a - 2 = 5a + 7$

1.	2.	3.
4.	5.	6.

Question 2

A survey was conducted to find the favorite class of 500 students. The results are recorded in the circle graph below.



1- How many students like Math?

2- What is the difference between students who like Music and students who like Art?

3- What is the total number of people who like English and Science?

Question 3

If $7m - 1 = 13$, What is the value of $3m$?

Question 4

A bag contains 9 blue, 5 red , 8 white and 3 yellow marbles, what is the probability of

1- Selecting a yellow marble?

2- Selecting a marble that is not white?

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Question 5

Solve for r in the following equation:

$$\frac{2}{r} - \frac{3}{2} = \frac{1}{2r}$$

Question 6

Simplify the following expression: $\left(\frac{m^3 m^4}{m^2}\right)^5$?

Question 7

Evaluate the following expression when $a = 3$, $b = -4$ and $c = 7$?

$$a + b\,(c - a)^2 - 5$$

Question 8

For the set of numbers { 8 , 4 , 1 , 1 , 11 , 7 , -2 , 5 , 8 , 1 } . Find the following :

1- Mean:

2- Median:

3- Mode:

4- Range:

Question 9

Factor the following expression :

1- $28x^2 - 7x$

2- $2ab + 4ab^2$

3- $y^2 - 5y - 66$

4- $b^2 + 7b + 12$

5- $7n^2 + 33n - 10$

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Question 10

Solve for x:

I. $-3x = 12$

II. $x + 5 = -2$

III. $\frac{x}{2} = -4$

IV. $2x - 1 = 9$

V. $-4x + 6 = -10$

VI. $4x - 6x = -20$

VII. $5x - 1 = 8x - 10$

VIII. $3 - x = -4$

IX. $10 - 6(x + 5) = -2$

X. $3(x - 5) = -2(4x + 9)$

Question 11

Simply the algebraic expression below:

i. $2x + 6x$

ii. $-3a + 6 - 6a + 8$

iii. $5y^2 + 8y - 6y^2 - 9$

iv. $-11m + 9 + 13 - 8m$

v. $3(b - 1)$

vi. $-2(c - 7) + 13c - 7$

vii. $2a + 7a - 9a + 10a$

viii. $8t - 7t + 4 + 12$

ix. $5(h + 6) - (h - 1)$

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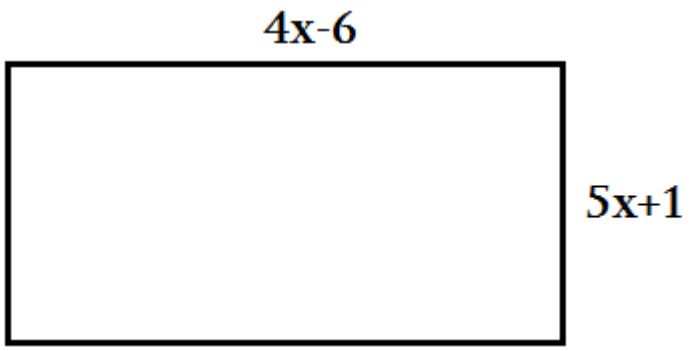
Question 12

Find the Area and the perimeter of the rectangle shown below:



Perimeter :

Area:

Question 13

On a map, distance in km varies directly with distance in cm, and 40 km are represented by 3 cm. If two cities are 7 cm a part on the map, what is the actual distance between them?

Question 14

A garden have a square shape, its area is 44 square ft, the length is 7 ft more than its width. Find its width and length?

Question 15

What is the average of the first 6 odd positive integers?