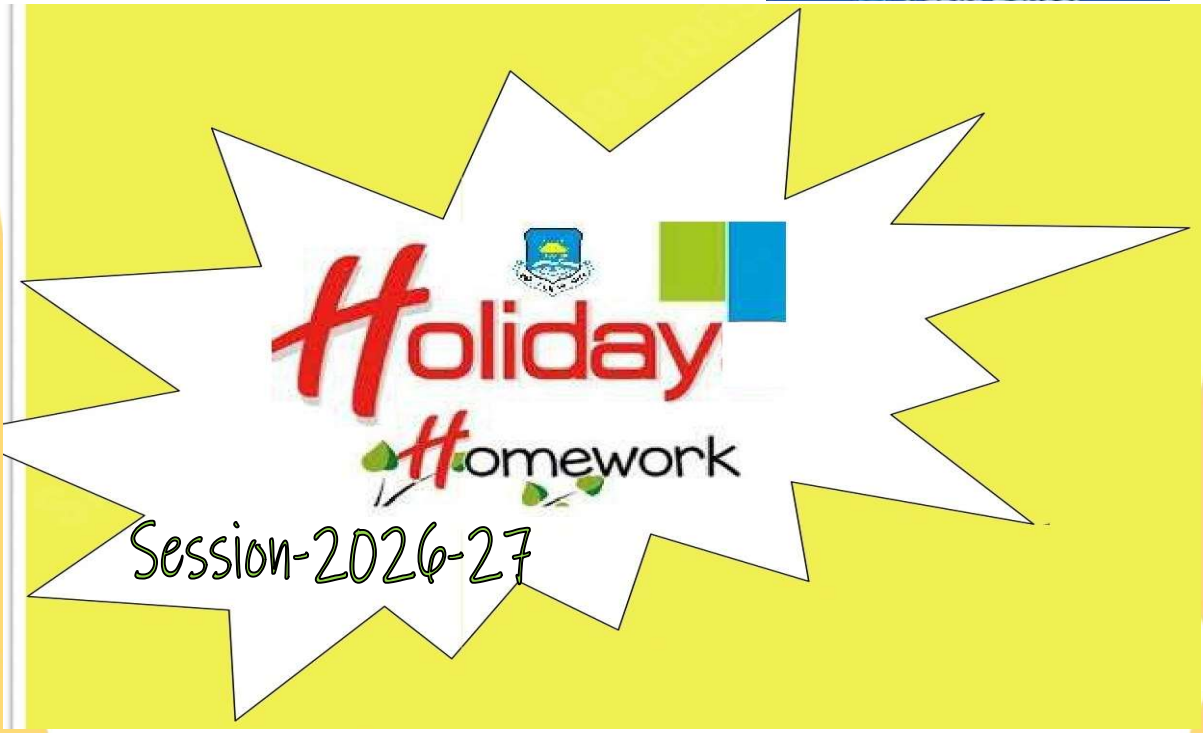
Affiliated to CBSE New Delhi
(Aff. Code. 1031043)
RASS-JB
Public School



Dear Parents,

As we head into the upcoming break, we want to ensure our students stay connected with their learning journey. To support this, we have prepared a Holiday Homework Worksheet.

We kindly request you to:

- Encourage your child to complete the worksheet independently, providing guidance only where necessary.
- Ensure the completed work is submitted to the class teacher by the school reopening date.

Wishing you and your family a wonderful and productive break.

With warm regards,

Principal

Student's Details

Name: _____

Class & Section:- 9th

English

1. Write the summary of these chapters:
    1. How I Taught My Grandmother to Read
    2. The Pot Maker
2. Explain 12 poetic devices with examples
3. Write letters:
    * Letter to the Editor (2)
    * Complaint Letters (2)
    * Order Placing Letters (2)
    * Inquiry Letters (2)
4. Diary Writing:
    * 10 special days of your summer vacation
5. Write 100 word meanings from chapters 1, 2, 3

हिन्दी

1. संज्ञा, सर्वनाम, क्रिया, विशेषण की परिभाषाऐं उदाहरण तथा भेद सहित लिखिए।
2. ग्रीष्म काल में आपने पशु अथवा पक्षियों के लिए किस प्रकार दाना–पानी की व्यवस्था की इस पर एक लेख (चित्र सहित) लिखिए।
3. किसी भी विषय पर दो औपचारिक तथा दो अनौपचारिक पत्र लिखिए।
4. पर्यावरण सरंक्षण पर एक पोस्टर तैयार कीजिए।
5. अलंकार की परिभाषा उदाहरण तथा उसके भेद सहित लिखो।
6. तीस पृष्ठ सुलेख लिखें।

Computer Technology

Q. 1 Describe the communication process step by step. How do all element work together.

(Give a real life example to support your answer)

Q. 2 Explain the role of IT industry in modern society.

Q. 3 What do you understand by open office and libra office ? (Features, difference)

Q. 4 Introduction to Rapid typing tutor and typing techniques.

PHYSICS

Portfolio -

Newton's Laws of Motion and their application in real life. (4 pages)

Format of portfolio should be

Index
Introduction
Topic Explanation
Conclusion

CHEMISTRY

1. Prepare a detailed report on types of mixture with example and their separation tech. (20 each)
2. Read about 5 scientists and their contribution in Chemistry. Write at least 50 words on each scientist onA4 paper and compile it in a transparent file.

BIOLOGY

1. Revise Chapter 5 (**CELL) The Fundamental Unit of Life.**
2. Draw diagrams of all the cell organelles on project papers and write the name of the scientist who discovered it along with their functions .
3. Make a innovative working model as per your choice.

Note: The work should be compiled in a Project File

Social Science

1. Create a scrapbook on:
   "Different types of Government Around the World"(Include pictures, examples, and short description)
2. Make a poster on:
   "Save Environment: Creation of Urban Heat Island – Growing Challenge"
3. Disaster Management Project:
   * Types of disasters (natural/man-made)
   * Safety measures
   * Real-life example case study

RASSJB PUBLIC SCHOOL DABRA

STD -9 (Maths) **Total Marks : 100**

HOLIDAY H.W.

*** Answer the following short questions. [2 Marks Each]** **[12]**

1. Classify the number 7.478478..... as rational or irrational.
2. In the following equations, find which variables x, y and z etc. represent rational or irrational numbers:
   $u^2 = \frac{17}{4}$
3. Write the value of $\sqrt[3]{125 \times 27}$.
4. Evaluate $\frac{2^n + 2^{n-1}}{2^{n+1} - 2^n}$.
5. Multiply:
   $\sqrt{10}$ by $\sqrt{40}$
6. Multiply:
   $3\sqrt{5}$ by $2\sqrt{5}$

*** Answer the following questions. [3 Marks Each]** **[21]**

7. Find five rational numbers between $\frac{3}{5}$ and $\frac{4}{5}$
8. Express the following in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$:
   .00323232...
9. Simplify the following:
   $(\sqrt{3} - \sqrt{2})^2$
10. Explain how irrational number is differ from rational numbers?
11. Prove that:
    $\left(\frac{x^a}{x^b}\right)^{a^2+ab+b^2} \times \left(\frac{x^2}{x^c}\right)^{b^2+bc+c^2} \times \left(\frac{x^c}{x^a}\right)^{c^2+ca+a^2} = 1$
12. If $x = 2 - \sqrt{3}$, find the value of $\left(x - \frac{1}{x}\right)^3$.
13. Express the following decimals in the form $\frac{p}{q}$, where p, q are integers and $q \neq 0$.
    $0.00\overline{32}$

*** Questions with calculation. [4 Marks Each]** **[28]**

14. If $x = \frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}$ and $y = \frac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$ then find the value of $x^2 + y^2$.
15. Represent $\sqrt{3.4}, \sqrt{9.4}, \sqrt{10.5}$ on the real number line.
16. Find six rational numbers between 3 and 4.

17. Locate $\sqrt{3}$ on the number line.

18. Express in the form of $\frac{p}{q}: 0.\overline{38}+1.\overline{27}$.

19. Represent $\sqrt{4.7}$ geometrically on the number line.

20. If $a=3-2\sqrt{2}$, find the value of $a^2-\frac{1}{a^2}$.

*** Answer the following questions. [5 Marks Each]** **[15]**

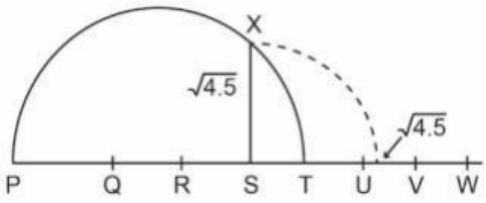
21. Locate $\sqrt{3}$ on the number line.

22. Express $0.6+0.\overline{7}+0.4\overline{7}$ in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$.

23. Plot the points A(1, -1) and B(4, 5):
    i. Draw a line segment joining these points. Write the coordinates of a point on this line segment between the points A and B.
    ii. Extend this line segment and write the coordinates of a point on this line which lies outside the line segment AB.

*** Case study based questions.** **[24]**

24. Q.1. Vasu represents √4.5 on the number line PW. The length of TS = 1 unit. His representation is shown below.



Q.2. Which letter represent 0 of the number line?

A. P

B. R

C. X

D. S

Q.3. Between which two points does 5.2 lie on this number line?

A. U and V

B. T and U

C. S and T

D. V and W

Q.4. Screen size is deined by the distance between two diagonally opposite corners of a screen. A manufacturer can make rectangular display screens as per clients' demands.

A client purchased a display screen of size $\sqrt{70}$ units from the manufacturer last year. For an upgrade, he wants the same type of screen with a larger display.

What are the possible dimensions of the screen purchased by the client last year?

Q.5. The new screen size must be more than double, but it should be less than three times that of the existing one.

Which of the following screen sizes meets the client's requirement?

A. $\sqrt{145}$ units

B. $\sqrt{175}$ units

C. $2\sqrt{70}$ units

D. $\sqrt{580}$ units

Q.6. The new display screen is to be installed in a space measuring 3 m × 3 m. To make the desired screen for the client, what other information is required by the manufacturer?

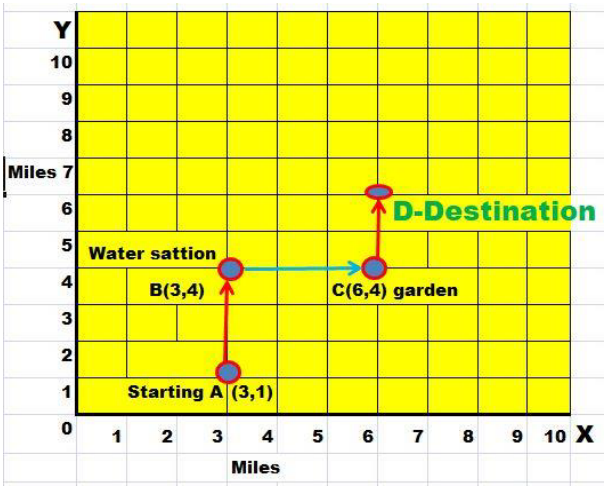
25. A number line consists of an ininite number of points. Points on it are associated with a rational
number.

Khushi says – 'A point on the number line can represent different forms of a rational number.'

Akash says – 'I think each point represents a unique rational number.'

Who is correct? Give an example to support your argument.

26. Read the Source/ Text given below and answer these questions:



Arun is participating in an 8 miles walk. The organizers used a square coordinate grid to plot the course. The starting point is at A (3, 1). At B (3, 4), there's a water station to make sure the walkers stay hydrated. From water station, the walkway turns right and at C (6,4) a garden is situated to keep walkers fresh. From the garden, the walkway turns left and finally, Arun reaches at destination D to complete 8 miles.

i. How far is the water station B from the starting point A?
   a. 4 miles
   b. 3 miles
   c. 1 mile
   d. 5 miles

ii. How far is the water station B from garden C?

a. 3 miles
b. 4 miles
c. 1 mile
d. 5 miles

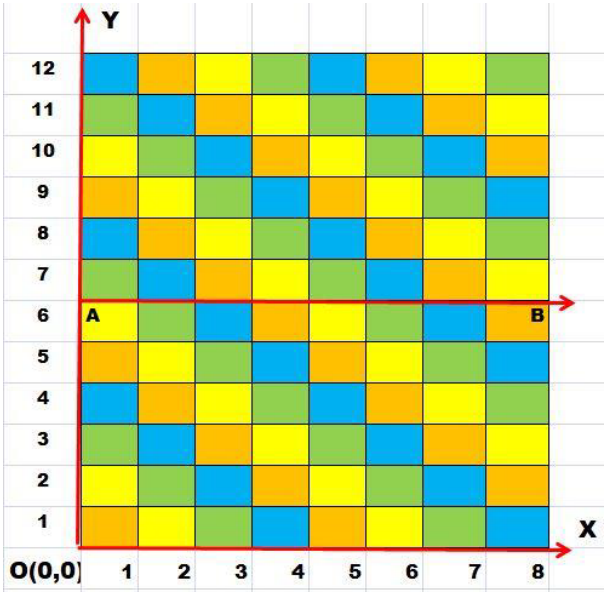
iii. What is the abscissa of destination point D:

a. 3
b. 5
c. 3
d. 6

iv. What is the ordinate of destination point D?

a. 3
b. 2
c. 6
d. 5

27. Read the Source/ Text given below and answer these questions:



Roshan decorated one of his bathroom wall with tiles as shown in the picture. He was having tiles of four colours orange, yellow, green and blue. He fitted the tiles in 8 columns and 12 rows. The size of one tile was 1 foot × 1 foot and the area of each tile is 1 foot^2. He arranged the tile in such a way that colour of tiles in each row and column were in the pattern: Orange → Yellow → green → Blue → Orange → ..... and so on. Now answer the following questions:

i. Which colour tile was fitted at the point with coordinates (5, 3)?

a. Orange.
b. Yellow.
c. Green.
d. Blue.

ii. Which colour tile was fitted at the point with coordinates (7, 7)?

a. Orange.
b. Yellow.
c. Green.
d. Blue.

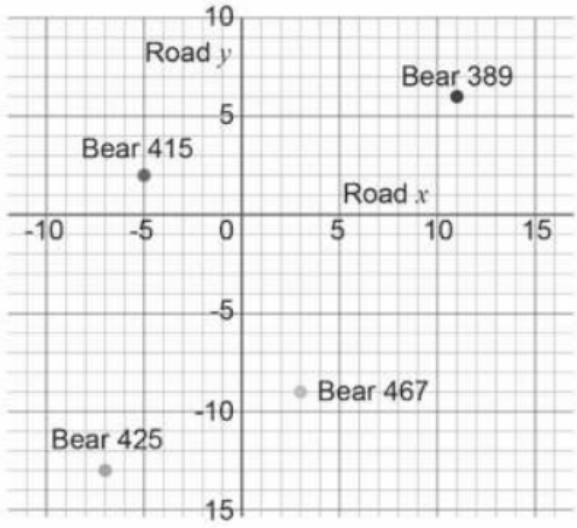
iii. Which colour tile was fitted at the point with coordinate (2, 5)?

a. Orange.
b. Yellow.
c. Green.
d. Blue.

iv. What is the area of the tiles fitted in the rectangular part OABX?

a. 50 foot^2
b. 24 foot^2
c. 12 foot^2
d. 48 foot^2

28. A forest ranger keeps track of bears in his area. He plotted their location on a graph. The origin represents the ranger's control room's location. To access and maintain equipment, Road x and Road yhave been laid and paved inside the forest. They pass through the control room.



One unit on the graph paper represents 1 km.

Q.1. In the forest, rain shelters are at an interval of 2 km along paved roads. A forest ranger is travelling on Road x. He crosses a rain shelter located at (3, 0). What is likely to be the location of the next shelter?

Q.2. The control room receives a message about trespassers located at (−9, −8). The trespassers were seen moving towards Road x on foot. The ranger immediately dispatches a team of guards in a jeep towards them. The guards encounter the trespassers before crossing Road x. Which of the following is

most likely to be the location of the encounter?

A. (–9, –14)

B. (–9, –5)

C. (–9, 4)

D. (9, 5)

Q.3. Ravi planted a red maple tree sapling. The height of the sapling is 0.25 m. The average growth rate of the height of a red maple tree is 0.27 m per year. The average life of a red maple tree is 80–100 years. Ravi estimated that his tree will grow up to 27 m. What is the likely reason behind his estimation?

Q.4. Which of the following equations represents the height (h) of the red maple tree after 't' years of planting?

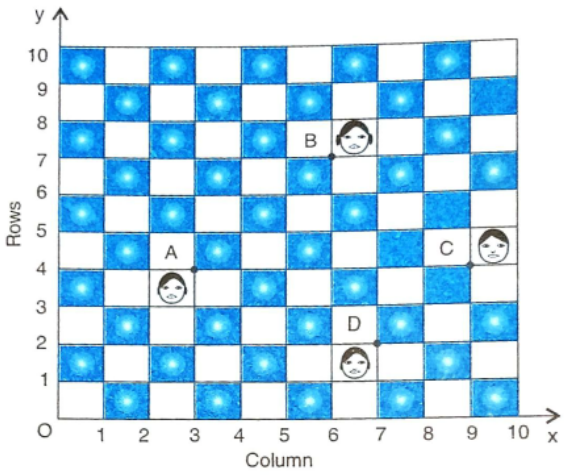
A. h=0.25+0.27

B. h=0.25t+0.27

C. h=0.25+0.27t

D. h=0.25+0.27t

29. Four persons John, Saurabh, Salim and Ratan are sitting in a courtyard at points A, B, C and D respectively as shown in Fig. The courtyard has been divided into small squares by drawing equally spaced horizontal and vertical lines. Taking OX and OY as the coordinates axes answer the following questions:



(i) The distance between John and Salim is

(a) 6 units (b) 4 units (c) 5 units (d) 7 units

(ii) The distance between John and Saurabh is

(a) 6 units (b) $3\sqrt{2}$ units (c) $6\sqrt{2}$ units (d) $2\sqrt{2}$ units

(iii) The distance between John and Ratan is

(a) $2\sqrt{5}$ units (b) $2\sqrt{10}$ units (c) $\sqrt{5}$ units (d) 20 units

(i) The coordinates of point A are

(a) $(4,3)$ (b) $(3,4)$ (c) $(3,3)$ (d) $(4,4)$

----- By -Rana Sir -----