

Subject	Homework
English Language	Create a beautiful 'Summer Memory Journal'.
English Literature	<ol style="list-style-type: none"><li>Project work on - "The World of Shakespeare" Find and collect information (including pictures) based on your assigned house headings- (a) Nalanda House: The life of William Shakespeare. (b) Vikramshila House: Works of Shakespeare. (c) Taxila House: The Merchant of Venice – Character profile. (d) Vallabhi House: The Merchant of Venice – Plot summary.</li><li>Prepare well for the July Test.</li></ol>
Hindi Language	➤ दस उपसर्ग तथा प्रत्ययों का प्रयोग कर नए शब्द बनाइए। (कार्य हिंदी भाषा की अभ्यास पुस्तिका में करें)
Hindi Literature	➤ पुस्तक में दिए गए प्रथम चक्र के पाठों के रचनाकारों का जीवन परिचय लिखिए तथा उनके चित्र भी लगाइए। (कार्य हिंदी साहित्य की अभ्यास पुस्तिका में करें)
Mathematics	➤ Solve the given worksheet in the comment sheet.
Physics	➤ Make a simple manometer to observe and measure pressure difference using liquid levels.
Chemistry	➤ Identify elements, compounds and mixtures in your daily life and paste them in the chemistry notebook. (Only 2 in each).
Biology	➤ To prepare a simple working model of the heart to show the role of valves.
History / Civics	<p><b>Make a scrapbook project:</b> Topic- The Industrial Revolution, the scrapbook should have the following title/heading-</p> <ol style="list-style-type: none"><li><b>Introduction:</b> The Age of Steam– invention of Steam Engine</li><li><b>The invention of Steam Engine-</b> The facts, working and importance of the Steam Engine are to be highlighted.</li><li><b>Steam on Move:</b> Changing the way we travel. a) Railways, Steam Ships and its impact on human life.</li><li><b>Factory life and cities:</b> The Good (Pros) the Bad (Cons)</li></ol> <p><b>Tips for the A-4 scrap book.</b> (i) Border use a dark marker. [not black] (ii) Decorate it with "Industrial Icons"</p>

**Dr. Virendra Swarup Education Centre, Avadhपुरi, Kanpur**  
**Summer Holiday Assignment (2026-27)**  
**Class – 8**

<b>Subject</b>	<b>Homework</b>
<b>Geography</b>	<ul style="list-style-type: none"><li>➤ Prepare a project on the positive and negative impacts of brain drain in India. Also suggest the measures to control it in the interest of the country. (Do it in the Geography notebook)</li><li>➤ Prepare chapter 1, 2 and 3 for <b>July Test</b>.</li></ul>
<b>Computer Science</b>	<ul style="list-style-type: none"><li>➤ In your computer register, paste the logos of 6 famous IT companies. Write a brief description about those companies.</li></ul>
<b>Art</b>	<ul style="list-style-type: none"><li>➤ Complete the given craft.</li></ul>

**Dr. Virendra Swarup Education Centre, Avadhपुरi, Kanpur**

**Summer Holiday Assignment (2026-27)**

**Class : 8**

**Subject : Mathematics**

**Chapters: Simple Interest and Compound Interest, Linear Equations and Inequations and Volume and Surface Area.**

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**Section - A**

- Q1. A man invested Rs 1000 on simple interest at a certain rate and Rs 1500 at 2% higher rate. The total interest in three years is Rs 390. What is the rate of interest for Rs 1500?
- Q2. The total surface area of cube is  $216 \text{ cm}^2$ . Find its volume.
- Q3. Solve the inequation  $3n + 8 < 29$ , if  $n \in W$  and represent the solution set on the number line.
- Q4. The sum of the digits of a two digit number is 9. The number obtained by reversing the order of digits of the given number exceeds the given number by 9. Find the given number.
- Q5. Solve the inequation  $7(x - 2) + 2 > 2(5x + 9)$ , if  $x \in Z$ .
- Q6. If the volume of a cube is  $729 \text{ cm}^3$ . Find its surface area.
- Q7. Solve the inequation  $-1 \leq 2x + 4$ , if  $x \in Z$  and show the solution on a number line.
- Q8. A room 5 m long, 4.5 m wide and 3.6 m high is to be white washed on the walls. The room has one door of 1.5 m by 2.4 m and two windows of 1 m by 0.75 m. Find the cost of white washing at the rate of Rs 4.50 per  $\text{m}^2$ .
- Q9. A solid cube of edge 18 cm is melted down and cast into cubes with edge 3 cm. Find the number of smaller cubes obtained.
- Q10. The volume and height of a cylinder are  $38.5 \text{ cm}^3$  and 4 cm respectively. Find the curved surface area and total surface area of cylinder.
- Q11. What is the compound interest on Rs 16000 for 9 months at 20% per annum, interest being compounded quarterly?
- Q12. The curved surface area of a cylinder of height 7 cm is  $44 \text{ cm}^2$ . Find the diameter of the base of the cylinder.
- Q13. Find the compound interest payable on Rs 1200 at 6% per annum at the end of 2 years compounded annually.
- Q14. What is the difference between the compound interest and simple interest on Rs 8000 at 15% per annum for 2 years?
- Q15. A man is 24 years older than his daughter. In 4 years, his age will be twice the age of his daughter. Find their present ages.
- Q16. What number must be subtracted from the numerator, and added to the denominator, of  $\frac{17}{22}$  to give rational number equal to  $\frac{5}{8}$ ?
- Q17. Solve the following equations:

(i)  $\frac{x - (6 - x)}{9x - (7 - x)} = 8$

(ii)  $\frac{2}{x - 7} = \frac{3}{x - 4}$

(iii)  $\frac{1}{10}(x - 1) - \frac{2}{15}(x + 1) = \frac{3}{20}$

(iv)  $2\frac{1}{7} - \frac{m - 4}{9} = m + 1\frac{1}{3}$

- Q18. One number is 4 more than another. The quotient of the larger divided by the smaller is  $\frac{5}{2}$ . Find the numbers.
- Q19. Ajay's mother is four times as old as Ajay. After five years, his mother will be three times as old as he will be then. What are their present ages?
- Q20. A boat travels 15 km upstream in the same period of time it takes 25 km downstream. If the current of water is 6 km/hr, what is the speed of the boat in still water?

### Section – B

#### Comprehension based questions:

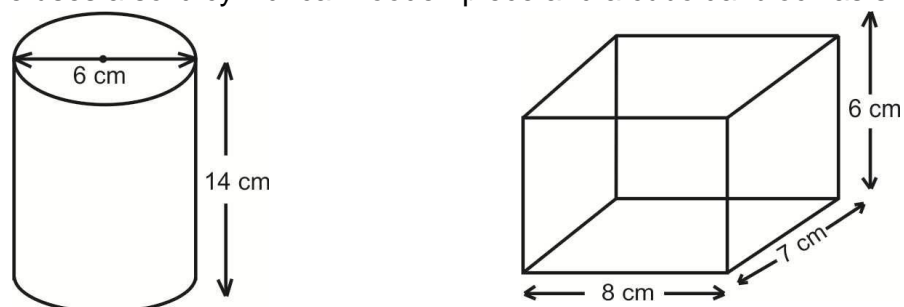
- Q1. Madhav works for ABC Solution Pvt. Ltd. His monthly salary is Rs 1,20,000. He wants to start investing a part of his salary. He decides to invest  $\frac{1}{3}$  of his salary in a bank at an annual interest rate of 8% compounded annually for 2 years. Additionally, he deposits Rs 10,000 at the beginning of each year and withdraws Rs 2000 annually. On the other hand, Krishna an employee of the same company with the same salary invests  $\frac{2}{3}$  of his income in a corporate bond at 6% compounded annually for 2 years. Additionally, Krishna deposited Rs 1000 every month in a fund on a simple interest of 10% p.a. for 2 years.

After 2 years :

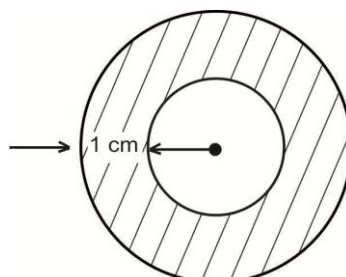
- Q (i) What is the income as interest of Madhav?  
 Q (ii) What is the income as interest of Krishna?  
 Q (iii) Who was more profitable?

- Q2. Manohar, a carpenter runs a toy shop in a village. He is very fond of making toys for kids. He keeps experimenting and tries to make new things for daily use of the kids in his village. He comes up with in an idea of making a wooden pencil stand.

For this he uses a solid cylindrical wooden piece and a cuboidal block as shown below.



Now, since the pencil stand is hollow, he transforms the solid cylindrical piece into a hollow cylinder whose cross-section looks like below:





Now, Distances between players of attacking team are as follow :

- 1 → 2             $(2x + 5)$  m
- 2 → 3             $(3x - 5)$  m more than 1 → 2
- 3 → 4             $(4x + 8)$  m
- 4 → 5             $(3x - 10)$  m more than 3 → 4
- 5 → 6            Half the distance between 3 → 4
- 6 → 4<sup>l</sup>            $6x$

The total distance covered by the ball from player to player is 145 m.

After the ball comes to player 6, he passes the ball to player 4 but player 4 receives the ball from 6 at position 4<sup>l</sup> as you can see in the picture.

From this position he makes the goal.

Player 4 had to run 10 m at a speed of 5 m/s from his position to 4<sup>l</sup> before he scores.

Now, help the sports analyst to know certain things based on the information given.

- 1) He wants to form a linear equation of the total distance covered by the ball from player 1 to 4<sup>l</sup>.
- 2) Help him to get the value of 'x' on the basis of which he can calculate the distance ball moves from player 2 to player 3.
- 3) The longest pass was the most accurate one. That pass is from \_\_\_\_\_ to \_\_\_\_\_.
- 4) The pass 6 → 4<sup>l</sup> was the most crucial one. Identity the distance ball moved.
- 5) At what speed should player 6 pass the ball to player 4 at 4<sup>l</sup> position so that player 4 receives the ball at the same time as soon as he reaches position 4<sup>l</sup>?