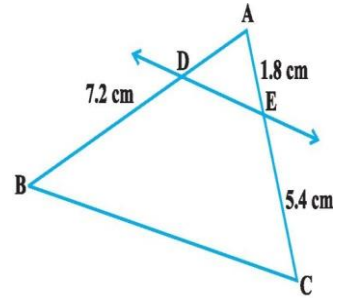


KENDRIYA VIDYALAYA PANISAGAR
AUTUMN BREAK HW
Class X
Subject- Mathematics

1. The roots of the equation $x^2 + 7x + 12 = 0$ are
 (a) 3 and 4 (b) -3 and 4 (c) -3 and -4 (d) 3 and -4

2. If $p - 1, p + 3, 3p - 1$ are in AP, then p is equal to
 (a) -4 (b) 4 (c) 8 (d) -8

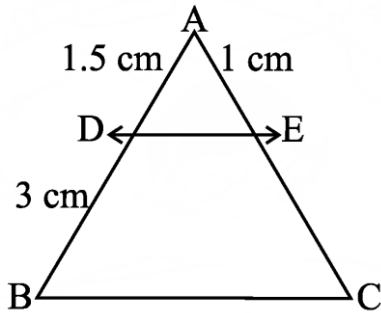
3. In figure $DE \parallel BC$ then the value of AD is
 (a) 2.4 cm (b) 2.0 cm (c) 3 cm (d) none of the above



4. What is the mid point of a line with end points $(3, 7)$ and $(11, -5)$?
 (a) $(7, -1)$ (b) $(14, -2)$ (c) $(7, 1)$ (d) none of these

5. Find the point on x-axis which is equidistant from $(2, -5)$ and $(-2, 9)$.

6. In the below figure, $DE \parallel BC$, find EC



7. Which term of the AP : 3, 8, 13, 18, is 78?

8. (a) Find the value of k for which the quadratic equation $9x^2 + 8kx + 16 = 0$ has two real equal roots
 (b) Factorise: $x^2 + 11x + 30 = 0$

9. Solve by using quadratic formula

$$40 + 3x - x^2 = 0$$

10. (a) How many terms of the AP : 24, 21, 18, ... must be taken so that their sum is 78?

(b) Find the sum of first 24 terms whose n th term is given by $a_n = 3 + 2n$.

11. A vertical pole of length 6m casts a shadow 4m long on the ground and at the same time a tower cast a shadow 28 m long. Find the height of the tower.

12. A point P lie on line segment joining the point $A(-4, 3)$ and $B(5, -2)$. IF $\frac{PB}{AB} = \frac{2}{5}$ find the coordinate of P .

13. State and prove basic proportionality theorem

14. Solve for x : $\frac{1}{a} + \frac{1}{b} + \frac{1}{x} = \frac{1}{a+b+x}$.

15. CASE STUDY 1:

India is competitive manufacturing location due to the low cost of manpower and strong technical and engineering capabilities contributing to higher quality production runs. The production of TV sets in a factory increases uniformly by a fixed number every year.

It produced 16000 sets in 6th year and 22600 in 9th year.

Based on the above information, Answer the following Questions:



- (i) What will be the production during first year.
- a. 2000 b. 2200 c. 2400 d. none of these
- (ii) What will production during 8th year.
- a. 18200 b. 20600 c. 20400 d. none of these
- (iii) What will the production during 3rd years.
- a. 9400 b. 2200 c. 11600 d. none of these
- (iv) In which year, the production is Rs29,200.
- a. 10 b. 11 c. 12 d. none of these
- (v) Find the difference of the production during 7th year and 4th year.
- a. 4400 b. 6600 c. 6000 d. none of these

16. CASE STUDY 2:

Raj and Ajay are very close friends. Both the families decide to go to Ranikhet by their own cars. Raj's car travels at a speed of x km/h while Ajay's car travels 5 km/h faster than Raj's car. Raj took 4 hours more than Ajay to complete the journey of 400 km.



Based on the above information, Answer the following Questions:

1. What will be the distance covered by Ajay's car in two hours?
- a) $2(x+5)$ km
b) $(x-5)$ km
c) $2(x+10)$ km
d) $(2x+5)$ km
2. Which of the following quadratic equations describe the speed of Raj's car?
- a) $x^2-5x-500=0$
b) $x^2+4x-400=0$
c) $x^2+5x-500=0$
d) $x^2-4x+400=0$

3. What is the speed of Raj's car?

- a) 20 km/hour
- b) 15 km/hour
- c) 25 km/hour
- d) 10 km/hour

4. How much time took Ajay to travel 400 km?

- a) 20hour
- b) 40hour
- c) 25hour
- d) 16hour

5. How much time took Raj to travel 400km?

- a. 20hour
- b. 40hour
- c. 25hour
- d. 16hour

QUES- Learn tables upto 20.

KENDRIYA VIDYALAYA, PANISAGAR
AUTUMN HOLIDAY HOMEWORK
CLASS X
SUBJECT- SCIENCE (BIOLOGY)

- Q1. Mention the secondary sexual characters in human males and females.
- Q2. Describe the menstrual cycle.
- Q3. Differentiate between menarche and menopause.
- Q4. Mention the methods used for regulation of childbirth.
- Q5. Define sexually transmitted disease and give two examples.

AUTUMN BREAK HOLIDAY HOMEWORK

SUBJECT : - CHEMISTRY

CLASS: - X

1. Class 10- Exercise of Carbon and its compounds

AUTUMN HOLIDAY HOMEWORK

CLASS –X

SUBJECT- COMPUTER SCIENCE

- 1. What is Sustainable Development?**
- 2. What is Sustainable Development Goals(SDG)?**
- 3. List all the 17 SDGs included in agenda 2030 for Sustainable Development?**

[Note – All the students of class X must write all questions in your school classwork copy.]

K V PANISAGAR
HOLIDAY HOMEWORK
CLASS X (ENGLISH)

- 1) Complete the exercise from the poem “ A Tale of Custard the Dragon”.
- 2) Complete the exercise from the chapter “ The Sermon at Benares”.
- 3) Revise the grammar – Tense, Reported Speech, and Subject Verb Agreement.

HOME – WORK FOR NEXT POOJA VACATION

(आशा शारदावकाश एग एग गृह-कार्य)

००

कुक – – 17 / 10 / 23

००

1. उल्साह कविता का सार अपने शब्द में लिखिए ।

०० = दस (गृह - कार्य - फाइल में)
2. माता की अचल पाठ के शीर्षक की सार्थकता पर अपना विचार व्यक्त कीजिए ।

3. आपके मोहल्ले के किसी भी समस्या पर संपादक को एक पत्र लिखिए ।

4. किसी भी दो उत्पाद पर 40 शब्दों में दो विज्ञापन लिखिए ।

KENDRIYA VIDYALAYA PANISAGAR
(AUTUMN BREAK HOMEWORK-2023-24)

CLASS X SUBJECT : SOCIAL SCIENCE

1. Write note on any three points given below (about 120 words each)
 - a. Bright future of Solar Energy in India
 - b. Industrial Pollution and steps to be taken to minimize it
 - c. Role of banks in Indian Economy
 - d. Mahatma Gandhi and Non co-operation movement
2. Map pointing

Label the following on outline map of India

1. Coal mines – Raniganj , Bokaro, Korba, Singrauli, Singareni, Neyveli , Jharia
 2. Oil fields - Digboi, Ankaleshwar, Mumbai high,
 3. Nuclear Power plants - Tarapur , Kakrapara, Rawat Bhata, Naraura, kalpakkam, Kaiga.
 4. Every student has to make a file to complete the map work.
 5. Q1-Locate the given locations on the outline map of India with appropriate symbols and shades.Map
 6. should be neat and clear. Use separate maps for each topic.
 7. Chapter 1: Resources and Development
 8. a. Major soil Types: alluvial,sandy,loamy,red and black.
 9. Chapter 3: Water Resources
 - 10.Dams:
 - 11.a. Salal
 - 12.b. Bhakra Nangal
 - 13.c. Tehri
 - 14.d. Rana Pratap Sagar
 - 15.e. Sardar Sarovar
1. Prepare interdisciplinary project on given topic. (See CBSE syllabus)
 2. Prepare Art Integrated Project on Paired State.
 3. Prepare a project on Consumer Rights.
 - 4.Portfolio (mention your activity, achievement, mygovt.in Quizzes , any other participaton.)
 5. Write five Sample Paper in your test notebook with answers. Sample Paper
 6. Prepare sample paper as per CBSE Patern 2023-24. (Assignment has given to individual)

8. When a 12 V battery is connected across an unknown resistor, there is a current of 2.5 mA in the circuit. Find the value of the resistance of the resistor.
9. A battery of 9 V is connected in series with resistors of $0.2\ \Omega$, $0.3\ \Omega$, $0.4\ \Omega$, $0.5\ \Omega$ and $12\ \Omega$, respectively. How much current would flow through the $12\ \Omega$ resistor?
10. How many $176\ \Omega$ resistors (in parallel) are required to carry 5 A on a 220 V line?
11. Show how you would connect three resistors, each of resistance $6\ \Omega$, so that the combination has a resistance of (i) $9\ \Omega$, (ii) $4\ \Omega$.
12. Several electric bulbs designed to be used on a 220 V electric supply line, are rated 10 W. How many lamps can be connected in parallel with each other across the two wires of 220 V line if the maximum allowable current is 5 A?
13. A hot plate of an electric oven connected to a 220 V line has two resistance coils A and B, each of $24\ \Omega$ resistance, which may be used separately, in series, or in parallel. What are the currents in the three cases?
14. Compare the power used in the $2\ \Omega$ resistor in each of the following circuits:
(i) a 6 V battery in series with $1\ \Omega$ and $2\ \Omega$ resistors, and (ii) a 4 V battery in parallel with $12\ \Omega$ and $2\ \Omega$ resistors.