

LITTLE FAIRY PUBLIC SCHOOL

HOLIDAYS HOMEWORK (2024-25)

CLASS – 9th

Summer Vacations will commence from 21May, 2024 to 30th June, 2024.

The school will reopen from 1st July,2024 (Monday)

Holiday homework is an attempt to channelize the creative energy , it keeps you connected with the syllabus. Doing it in the right- spirit with enthusiasm will make it a great learning experience

General Instructions :

1. *Revise all the work done in the class .*
2. *Make sure that your work is neat, presentable, and original and conforms to the guidelines.*
3. *Engage yourselves in morning walks, yoga, exercise,meditation with your parents or grandparents.*
4. *Do the given homework as directed by the teachers.*

ENGLISH:

A. Need to do all questions in Assignment Book

- * **Descriptive Paragraph** -Assignment -1,2,3(page number B1- 28, 29 ,30)
- * **Short Story** -Assignment 1 ,2 ,3 (page number B1– 16 ,17 ,18)
- * **Diary Entry** - Assignment -4,5,6, 7 (page no B1-6,7,8,9,10)
- * **Discursive Unseen Passage** - Assignment 1,2,3,4 (Page No A8,8,10,11)
- * **Factual Unseen Passage** -Assignment 1,2,3,4 (Page No A-27,29,30,31)

B. The Students are directed to read newspapers and magazines daily and update themselves with the current affairs.

- * Maintain a personal diary and write three new words with their meanings everyday along with current affairs.
- * Write central idea and poetic devices of the poem **The Road Not Taken** on the A4 size colour sheet.

C. Make a collage using powerful cut out from newspapers or magazines , sayings/quotes/slogans etc. on A3 size sheet .Use any ONE of the following socially relevant themes:

- | | | |
|--------------------------------|---------------------------------------|----------------------------|
| (a) Stop female foeticide | (b) Save the environment | (c) Educate the girl child |
| (d) Protect endangered species | (e) Empathy for the differently abled | (f) Stop child labor |

D. Creative Monologue-

Students would choose a character from any of the chapters studied in literature or a famous novel and prepare a monologue based on the character's perspective.(Time limit- 5-10 mins). The prepared Monologue will be presented in class on 8th July, 2024(Monday)

ART INTEGRATED PROJECT

1. Make a **Captivating Travel Brochure** on **LAKSHADWEEP ISLAND**.

A travel brochure is a promotional material that advertises a destination, sight seeing attraction, or tour activity. Brochures can both inspire tourists to plan a trip as well as educate them about sights to see and things to do after they've arrived at their place of interest.

How to Create a Travel Brochure Step by Step

1. Use a Color Scheme that Complements Your Imagination.
2. Write Descriptive Copy
3. Include Geographical Details and Contact Info.

When designing a brochure, you should know where each piece of information should be placed. What to put in the back of the brochure, on the cover, and so on. In the next paragraphs, Here are some must-have elements that your brochure should contain. Let's take a look at them.

1. A catchy headline
2. Purposeful visuals
3. Concise text
4. Branding elements
5. Contact information
6. Call to action

Hindi :

ग्रीष्म अवकाशकार्य

- 1) बचेंद्री पाल का जीवन परिचय लिखते हुए उनकी एवरेस्ट यात्रा का संक्षिप्त विवरण लिखिए।
- 2) हरिवंश राय बच्चन जी द्वारा लिखित आपकी पाठ्य पुस्तक के अतिरिक्त दो कविताएं लिखें।
- 3) निम्नलिखित विषयों पर भाषण तैयार कीजिए। (समय सीमा 3-5 मिनट)
 - क) पर्वतीय संपदा का दुरुपयोग
 - ख) विद्यार्थी जीवन में नैतिक शिक्षा का महत्व
- 4) अंडमान निकोबार लक्ष्यद्वीप की कला संस्कृति और सामाजिक जीवन पर आधारित एक परियोजना तैयार करें।
- 5) स्मृति पाठ का सारांश अपनी लेखन पुस्तिका में लिखें।

MATHEMATICS :

1. Real-Life Applications Exploration:

- Choose a mathematical concept studied this year (e.g., algebra, geometry, statistics).
- Research and identify at least three real-life applications of this concept in different fields (e.g., engineering, finance, medicine).
- Present your findings creatively, such as through a poster, presentation, or short video.

2. Find the name of the mathematician who have got Noble Prize. Write the name of five mathematician from list and mention the work for which they have got price.

3. Mathematical Games and Puzzles:

- Enjoy some mathematical fun with interactive games and puzzles.
- Choose at least two games from the provided list (e.g., Sudoku, logic puzzles) and solve them during your leisure time.
- Share your experience and strategies for solving these puzzles with your classmates when school resumes.

4. Artistic Exploration of Mathematics:

- Create a piece of mathematical art using geometric shapes, symmetry, patterns, or fractals.
- You can use any medium of your choice, such as paper collage, digital design software, or sidewalk chalk.
- Reflect on how mathematical concepts influenced your artistic creation

5. ART INTEGRATED PROJECT –

The Andaman and Nicobar Islands are home to about a dozen of endangered languages. The majority of the population speaks immigrant languages.

Demonstrate different languages spoken in Andaman and Nicobar through a Pie Chart.

The most common spoken language in Lakshadweep is Malayalam.

Search for others language spoken here and exhibit it by a Pie chart.

6. FUN 'N' LEARN ACTIVITY –

Our window to avoid climate catastrophe is closing rapidly.

Write down the average temperature in Delhi for the month of June for past 5 years.

Mention the reason behind this change of climate and also give some suggestions.

How can you help to bring a little impact on this climate change?

SCIENCE :

1. Slogan Writing on - Greening on Earth

2. Write the following experiments from science manual in your science practical file. Note down Aim, materials and Apparatus required, theory, procedure, label diagrams, observations, precautions:

(i) Experiment – 1, 2, 5A, 5B, 6A

(ii) Verification of the Laws of reflection of sound

3. Prepare Science model on given topic:

Theme: Science & Technology for Society

Sub Themes:

(i) Health (Roll No.1 to 8)

(ii) Life(Life style for environment) (Roll No.9 to 16)

(iii) Agriculture (Roll No.17 to 24)

(iv) Communication and transportation (Roll No.25 to 32)

(v) Computational Thinking (Roll No.33 onwards)

Instructions :

Model should be working based on scientific principles.

Strictly not advise to use thermocol.

4. ART INTEGRATED work

Make a PowerPoint presentation depicting biodiversity of Lakshadweep island.

SOCIAL SCIENCE:

Geography: Prepare My own Atlas on the following topics:

Instructions: Cover page showing Project Title, Schools Name, Name, Class and Section and all the maps will be pasted on A4 sheets separately. Arrange all the sheets properly in order and staple them.

(I) Chapter-1: Locate and label the following on the political map of India.

(Use 1 map only)

(a) Tropic of Cancer (Allocate the states on tropic of cancer)

(b) Standard Meridian

(c) Latitudinal extent and Longitudinal extent

(d) Southernmost point of India

(e) Northernmost Countries

(f) Eastern most point

(g) Western most point

(h) Neighbouring point

(II) Chapter-2: Physical Features of India Locate and label the following on the political map of India.:

(Use 2 separate Maps)

A) **Mountain and hill ranges:** The Karakoram, The Zaskar, The Patkai Bum, The Jaintia,

The Vindhya, The Aravalli, The Cardamom

B) **Peaks:** K2, Kanchenjunga, Nanga Parbat Ana Mudi

C) **Plateau:** Chhota Nagpur Plateau, Malwa Plateau, Deccan Plateau

D) The Indian Desert, Western Ghats and Eastern Ghats

E) Lakshadweep and Andaman & Nicobar Islands

(III) Chapter 3: Drainage

Locate and label the following on the political map of India. (Use 1 map only)

(a) **Rivers:** The Himalayan River Systems, The Indus, The Ganga, The Satluj. The Kaveri,

The Krishna, The Perennial river, The Narmada, The Tapi, The Godavari The Mahanadi

(b) **Lakes:** Wular. Palicut, Sambhar, Chilika,

(IV) HISTORY

Draw the outline map of France and Locate and label the following from the chapter -The French Revolution

Bordeaux, Nantes, Paris, Normandy, Marseilles,

Disaster Management project: Complete this project which will be followed by Viva Voce

1. TOPIC-DISASTER MANAGEMENT

Your project must include

- Introduction
- Definition of Disaster
- What are the types of Disasters?
- What is vulnerability and risk?
- What is a Hazard?
- Differentiate between hazard and disaster.

2. CHOOSE ANY ONE NATURAL OR MAN-MADE DISASTER.

On the basis of your selection collect and present information about the same under following headings

- Meaning • Causes
- Do's and don'ts
- Prevention and mitigation measures
- Your emergency Kit
- Steps taken by the Govt. to combat the disaster
- Latest means of forecasting Disasters
- Emergency numbers to be contacted.

GUIDELINES FOR SUBMITTING THE PROJECT

1. The total length of the project must be maximum 15-17 sheets .
2. The project report must be hand written and not a computerized or digital one.
3. It must be presented in the following order
 - a. Cover Page: must contain title, student's details (full name of the student class and section. Roll number), school's name and session
 - b. Contents: List of contents with page numbers
 - c. Acknowledgement: Acknowledging the institution and the persons who helped. d. Subject Matter/Content: Sub topics with relevant headings.
 - e. Summary and conclusion:
 - f. Bibliography: it must have the names of books, websites along with the links from where the content is collected
 - g. Photographs and sketches should be labeled
 - h. The project must be submitted in a file dully covered. The cover should be relevantly designed and decorated. (as per topic)
3. **Prepare your own attractive newspaper on Elections.**
4. **Do given assignment in notebook.**

ART INTEGRATED PROJECT

1. Prepare a Scrap book on the different Economic Activities performed by the people of Lakshadweep islands.
*Students may use variety of coloured papers and coloured pictures/photographs from magazines and newspapers (which are easily available).
2. **Do the following according to Roll number**
Lakshadweep and Andaman and Nicobar group of Islands
Roll no. 1 to 9 : Prepare a **Collage** showing Biodiversity flora and fauna richness of Lakshadweep and Andaman and Nicobar group of Islands
Roll no. 10 to 18: Prepare a **Scrap book** on the different traditional dance forms of the people of Lakshadweep
Roll no. 19 to 38: Prepare à **Project** on the top Lakshadweep and Andaman Nicobar Islands - A Comparative Study (mainly in terms of Location, Formation and Characteristic features Use of maps
Roll no. 28 to 37: Prepare à **Brochure** on the tourism of Lakshadweep and Andaman Nicobar Islands

INFORMATION TECHNOLOGY:

1. Write the shortcut keys of the commands given below:

- i) Undo the last action _____
- ii) Open a new window/document _____
- iii) To close the current window _____
- iv) To select whole document _____
- v) To cut the selected item _____
- vii) To copy the selected text or image _____
- viii) Redo the last action _____
- ix) To paste the cut/copied text or image _____

2. Collect the example of the use of IT in the following areas

Practice	Examples
Hospitals	
Schools	
Education	
Library management	
Assessment	
BPO	
Communication	
Broad Casting and NEWS	

ACTIVITY

3. Draw/Represent the following on A3 Sheets according to your roll number: (10 marks)

- i) Artificial Intelligence (Roll no. 1 to 10)
- ii) Networking (Roll no. 11 to 20)
- iii) Generation of computer (Roll no. 21 to 30)
- iv) History of computer (Roll no. 31 to 45)

4. Research work:

- i) Visit a nearby bank and observe carefully the working of computer there. Make a list of the various uses of IT in a banking system.
- ii) List any 5 websites of the Indian government (.gov) which provide IT enabled services to the people.
- iii) IT project: Topic: ITEs(Part B Unit -1)

The topic must contain the following points:

- a) Introduction to IT and ITEs
- b) The basic requirement of IT enabled services.
- c) The pros and cons of using ICT.
- d) The uses of IT in daily life- Give examples also
- e) precautions are required to ensure that ICT use is safeIntelligence
- f) The four main sub-sectors in the IT-BPM industry.

Make your project on MS-Word or Open Office Writer and print out on A4 sheet paper.


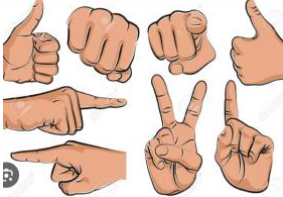



Add information and pictures to make it attractive.

On the first page print topic name, your name, class and section. From second page print information about the topic. Use at least 5 pages to complete the project. Don't print information on both side of the page.

OR

Make PPT (PowerPoint presentation) on the topic: The factors that affect perspectives in communication.

3. Complete the table:

	Type	What it implies	How to make use of non-verbal communication effectively?
i)	Facial Expression 		
ii)	Gestures or Body Language 		
iii)	Touch 		
iv)	Eye Contact 		
v)	Paralanguage 		

Note: Activities given in Holidays Home Work will be assessed as Internal Assessment of IT.

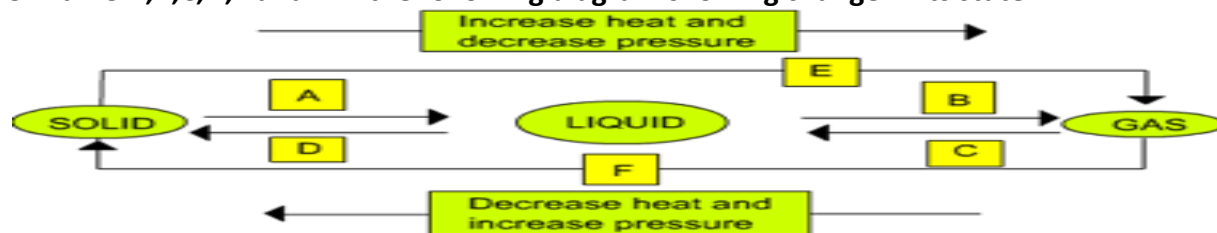
SCIENCE

Chemistry Matter in Our Surrounding

1. A diver is able to cut through water in a swimming pool. Which property of matter does this observation show?
2. What are the characteristics of the particles of matter?.
3. (a) Tabulate the differences in the characteristics of states of matter.
 (b) Comment upon the following: rigidity, compressibility, fluidity, filling a gas container, shape, kinetic energy and density.
4. Give reasons
 - (a) A gas fills completely the vessel in which it is kept.
 - (b) A gas exerts pressure on the walls of the container.
 - (c) A wooden table should be called a solid.

(d) We can easily move our hand in air but to do the same through a solid block of wood we need a karate expert.

5. Name A,B,C,D,E and F in the following diagram showing change in its state.



6. Are the three state of matter inter-convertible? How can they interconnect?

7. How does evaporation cause cooling?

8. Why should we wear cotton clothes in summer?

9. What is the state of inter particle distance inside a solid, liquid and gas?

10. Why it is that to smell cold food, we have to go close but smell of hot food reaches us several meters away?

11. Why is it that a wooden chair should be called a solid and not a liquid?

12. Give an experiment to show that ammonium chloride undergoes sublimation.

Biology **The Fundamental Unit of Life**

1. How do substances like CO_2 and water move in and out of the cell? Discuss.

2. Fill in the gaps in the following table illustrating differences between prokaryotic and eukaryotic cells.

3. Make a comparison and write down ways in which plant cells are different from animal cells.

4. How is a prokaryotic cell different from a eukaryotic cell?

5. How does an *Amoeba* obtain its food?

6. What is osmosis?

7. Carry out the following osmosis experiment:

Take four peeled potato halves and scoops each one out to make potato cups. One of these potato cups should be made from a boiled potato. Put each potato cup in a trough containing water. Now,

(a) Keep cup A empty

(b) Put one teaspoon sugar in cup B

(c) Put one teaspoon salt in cup C

(d) Put one teaspoon sugar in the boiled potato cup D.

Keep these for two hours. Then observe the four potato cups and answer the following:

(i) Explain why water gathers in the hollowed portion of B and C.

(ii) Why is potato A necessary for this experiment?

(iii) Explain why water does not gather in the hollowed out portions of A and D.

8. Who discovered cells, and how?

9. Why is the cell called the structural and functional unit of life?

10. Why is the plasma membrane called a selectively permeable membrane?

11. If the organisation of a cell is destroyed due to some physical or chemical influence, what will happen?

12. Why are lysosomes known as suicide bags?

13. What would happen if the plasma membrane ruptures or breakdown?

14. What would happen to the life of a cell if there was no Golgi apparatus?

15. Which organelle is known as the powerhouse of the cell? Why?

16. Where do the lipids and proteins constituting the cell membrane get synthesised?

Tissue

1. What is the utility of tissues in multi-cellular organisms?

2. Write about the functions of – (a) Epidermis (b) cork (c) stomata.

3. Differentiate between parenchyma and collenchyma.

4. Give reasons for –

(a) intercellular spaces are absent in sclerenchymatous tissues.

(b) Meristematic cells have a prominent nucleus and dense cytoplasm but they lack vacuoles.

(c) We get crunchy and granular feeling, when we chew pear fruit.

- Why is epidermis important for the plants?
- Describe different types of meristems.
- If a potted plant is covered with a glass jar, water vapours appear on the wall of glass jar. Explain why?
- Differentiate between meristematic and permanent tissue.

Physics Motion

- An object has moved through a distance. Can it have zero displacement? If yes, support your answer with an example.
- A farmer moves along the boundary of a square field of side 10 m in 40 s. What will be the magnitude of displacement of the farmer at the end of 2 minutes 20 seconds?
- A train starting from a railway station and moving with uniform acceleration attains a speed 40 km h^{-1} in 10 minutes. Find its acceleration.
- What can you say about the motion of an object whose distance-time graph is a straight-line parallel to the time axis?
- What can you say about the motion of an object if its speed time graph is a straight line parallel to the time axis?
- A train is travelling at a speed of 90 km h^{-1} . Brakes are applied so as to produce a uniform acceleration of -0.5 m s^{-2} . Find how far the train will go before it is brought to rest.
- A stone is thrown in a vertically upward direction with a velocity of 5 m s^{-1} . If the acceleration of the stone during its motion is 10 m s^{-2} in the downward direction, what will be the height attained by the stone and how much time will it take to reach there?

- Derive the second equation of motion $S = ut + \frac{1}{2}at^2$ graphically?

- A car moving with a certain velocity comes to a halt if the retardation was 5 m/s^2 , find the initial velocity of the car?

- Two cars A and B are moving along in a straight line. Car A is moving at a speed of 80 kmph while car B is moving at a speed 50 kmph in the same direction, find the magnitude and direction of
 - The relative velocity the relative of car A with respect to B
 - The relative velocity of car B with respect to A.

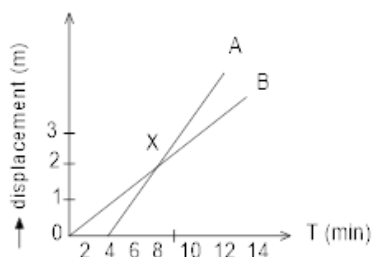
- A ball starts from rest and rolls down 16 m down an inclined plane in 4 s.
 - What is the acceleration of the ball?
 - What is the velocity of the ball at the bottom of the incline?

- A body is dropped from a height of 320 m. The acceleration due to the gravity is 10 m/s^2 ?
 - How long does it take to reach the ground?
 - What is the velocity with which it will strike the ground?

- Derive third equation of motion $v^2 - u^2 = 2as$ numerically?

- Derive the third equation of motion $v^2 - u^2 = 2as$ graphically?

- Two boys A and B, travel along the same path. The displacement – time graph for their journey is given in the following figure.

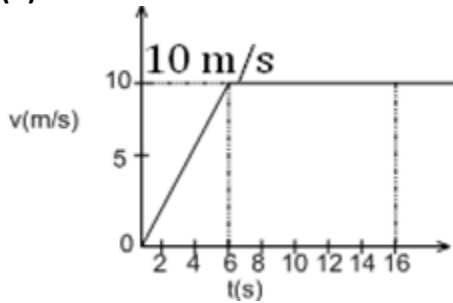


- How far down the road has B travelled when A starts the journey?

- (b) Without calculation, the speed, state who is traveling faster A or B?
 (c) What is the speed of A? (d) What is the speed of B?
 (e) Are the speed of A and B uniform? (f) What dose point X on the graph represent?
 (g) What is the speed of approach of A towards B? (h) What is the speed of separation of A from B?

15. The velocity time graph of runner is given in the graph.

- (a) What is the total distance covered by the runner in 16s?
 (b) What is the acceleration of the runner at $t = 11s$?



16. A boy throws a stone upward with a velocity of $60m/s$. ($g = -10m/s^2$)

- (a) How long will it take to reach the maximum height?
 (b) What is the maximum height reached by the ball?
 (c) How long will it take to reach the ground?

17. The displacement x of a particle in meters along the x - axis with time ' t ' in seconds according to the equation-

$$X = 20m + \left(\frac{12m}{s}\right) t$$

- (a) draw a graph if x versus t for $t = 0$ and $t = 5$ sec
 (b) What is the displacement come out of the particles initially?
 (c) What is slope of the graph obtained?

18. The velocity of a body in motion is recorded every second as shown-

Time(s)	0	1	2	3	4	5	6	7	8	9	10
Velocity(m/s)	62	54	48	42	36	30	24	18	12	6	0

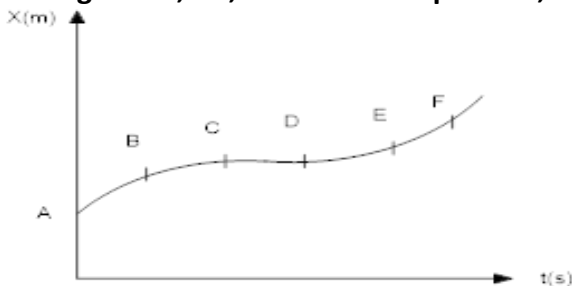
Calculate the –

- (a) Acceleration (b) distance travelled and draw the graph.

19. Draw the graph for uniform retardation –

- (a) position – time graph (b) velocity – time (c) Acceleration- time

20. The displacement – time graph for a body is given. State whether the velocity and acceleration of the body in the region BC, CD, DE and EF are positive, negative or Zero.



ASSIGNMENT

- If $x + y = 12$ and $xy = 32$, Find the value of $x^2 + y^2$.
- If $3x + 2y = 12$ and $xy = 6$, find the value of $9x^2 + 4y^2$.
- Write the following cubes in the expanded form:
 - $(3a + 4b)^3$
 - $(5p - 3q)^3$
- If $x^2 + \frac{1}{x^2} = 27$, find the values of each of the following:
 - $x + \frac{1}{x}$
 - $x - \frac{1}{x}$
- If $x - \frac{1}{x} = 4$, then evaluate $x^2 + \frac{1}{x^2}$ and $x^6 + \frac{1}{x^6}$.
- If $a + b + c = 15$ and $a^2 + b^2 + c^2 = 83$, find the value of $a^3 + b^3 + c^3 - 3abc$.
- Factorize:
 - $6ab - b^2 + 12ac - 2bc$
 - $9(2a - b)^2 - 4(2a - b) - 13$
- If $x^3 + ax^2 - bx + 10$ is divisible by $x^2 - 3x + 2$, find the values of a and b .
- Using factor theorem, factorize each of the following polynomials:
 - $x^3 - 6x^2 + 3x + 10$
 - $2y^3 - 5y^2 - 19y + 42$
- Find the value of k , if $(x - 1)$ is a factor of $4x^3 + 3x^2 - 4x + k$.

11. If $x = \frac{\sqrt{3} - \sqrt{2}}{\sqrt{3} + \sqrt{2}}$ and $y = \frac{\sqrt{3} + \sqrt{2}}{\sqrt{3} - \sqrt{2}}$, find the value of $x^2 + y^2 + xy$.

12. If $x = \frac{2 - \sqrt{5}}{2 + \sqrt{5}}$ and $y = \frac{2 + \sqrt{5}}{2 - \sqrt{5}}$, find the value of $x^2 - y^2$.

13. Determine rational numbers p and q if

$$\frac{7 + \sqrt{5}}{7 - \sqrt{5}} - \frac{7 - \sqrt{5}}{7 + \sqrt{5}} = p - 7\sqrt{5}q.$$

14. Simplify: $\frac{6}{2\sqrt{3} - \sqrt{6}} + \frac{\sqrt{6}}{\sqrt{3} + \sqrt{2}} - \frac{4\sqrt{3}}{\sqrt{6} - \sqrt{2}}$

15. Simplify: $\frac{3\sqrt{2}}{\sqrt{6} - \sqrt{3}} + \frac{2\sqrt{3}}{\sqrt{6} + 2} - \frac{4\sqrt{3}}{\sqrt{6} - \sqrt{2}}$

16. Show that: $\frac{1}{3 - \sqrt{8}} - \frac{1}{\sqrt{8} - \sqrt{7}} + \frac{1}{\sqrt{7} - \sqrt{6}} - \frac{1}{\sqrt{6} - \sqrt{5}} + \frac{1}{\sqrt{5} - 2} = 5$

17. If: $x = \frac{\sqrt{p+q} + \sqrt{p-q}}{\sqrt{p+q} - \sqrt{p-q}}$ then find the value of $qx^2 - 2px + q$.

18. Show that: $\frac{x^{-1} + y^{-1}}{x^{-1}} + \frac{x^{-1} - y^{-1}}{x^{-1}} = \frac{x^2 + y^2}{xy}$

19. If $2^a = 3^b = 6^c$ then show that $c = \frac{ab}{a+b}$.

20. If $x = 2 + 3\sqrt{2}$, then find the value of $\left(x + \frac{14}{x}\right)$.

