ANSWER KEY CLASS 8 CBT FEB(2024)

CBT 8th MATHS

1. Radha has five rectangular cardboards each having length $2x^2 – 7x + 3$ and width $– 2x + 3$. What will be the perimeter of each cardboard?
   A)$4x^2 – 18x + 12$
   B)$2x^2 – 18x + 3$
   C)$2x^2 – 7x + 12$
   D)$4x^2 – 7x + 12$
2. Radha has five rectangular cardboards each having length $2x^2 – 7x + 3$ and width $– 2x + 3$. What will be the perimeter of each cardboard if x=0 ?
   A) 11 units
   B)12 units
   C)13 units
   D)14 units
3. Radha has five rectangular cardboards each having length $2x^2 – 7x + 3$ and width $– 2x + 3$. What will be the area of each cardboard?
   A)$-4x^3+4x^2 – 18x + 27$
   B)$-4x^3+4x^2 – 27x + 12$
   C)$-4x^3+20x^2 – 27x + 9$
   D)$-4x^3+4x^2 – 18x + 12$

4. Radha has five rectangular cardboards each having length $2x^2 – 7x + 3$ and width $– 2x + 3$. What will be the area of each cardboard if x=0 ?
   A)6 square units
   B)7 square units
   C)8 square units
   D)9 square units
5. The distance of all the planets from the Sun in kilometers (km) is given in the table below:

Planet	**Distance from Sun (km)**
Mercury	57,900,000
Venus	108,200,000
Earth	149,600,000
Mars	227,900,000
Jupiter	778,600,000
Saturn	1,433,500,000
Uranus	2,872,500,000

Neptune	4,495,100,000

What is the distance of Venus from the Sun in the standard form?

A) 1.082×10^6

B) 1.082×10^7

C) 1.082×10^8

D) 1.082×10^9

6. The distance of all the planets from the Sun in kilometers (km) is given in the table below:

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Mercury	57,900,000
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Earth	149,600,000
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Saturn	1,433,500,000
Uranus	2,872,500,000
Neptune	4,495,100,000

What is the distance of Jupiter from the Sun in the standard form?

A) 7.786×10^8

B) 77.86×10^7

C) $778.6x\ 10^8$

D) 7786×10^9

7. The distance of all the planets from the Sun in kilometers (km) is given in the table below:

Planet	**Distance from Sun (km)**
Mercury	57,900,000
Venus	108,200,000
Earth	149,600,000
Mars	227,900,000
Jupiter	778,600,000
Saturn	1,433,500,000
Uranus	2,872,500,000
Neptune	4,495,100,000

What is the distance of Neptune from the Sun in the standard form?

A) 4.4951×10^8

B) 4.4951×10^9

C) 4.4951×10^{10}

D) 4.4951×10^{11}

8. Rohan , Rajesh and Rajat have 28, 42 and 56 flowers respectively. They have to make garlands with these flowers. If each garland has 14 flowers. How many garlands can be made ?
   A) 6
   B) 7
   C) 8
   D) 9
9. Rohan , Rajesh and Rajat have 28, 42 and 56 flowers respectively. They have to make garlands with these flowers. If each garland has 7 flowers than having 14 flowers,more garlands can be made. This is ……
   A) Direct proportion
   B) Inverse proportion
   C) Direct and Inverse proportion both
   D) None of these
10. Rohan , Rajesh and Rajat have 28, 42 and 56 flowers respectively. They have to make garlands with these flowers. If each garland has 7 flowers. How many garlands can be made ?
   A) 12
   B) 18
   C) 20
   D) 24

Solutions:

1) B

Feedback:We can find the perimeter when x=0 by putting this value in $4x^2 – 18x + 12$ to get 12.

2) C

Feedback: Area of rectangle is length x breadth . Using this formula we can find its area as $(2x^2 – 7x + 3) x (– 2x + 3)$ i.e. $-4x^3+20x^2 – 27x + 9$

3) D

Feedback:We can find the area when x=0 by putting this value in $-4x^3+20x^2 – 27x + 9$ to get 9.

4) C

Feedback:Any number that we can write as a decimal number, between 1.0 and 10.0, multiplied by a power of 10, is said to be in standard form. 3.25×10^8; If you observe carefully, 3.25 is a decimal number between 1.0 and 10.0 and so we have the standard form of 325,000,000 as 3.25×10^8. Similarly, $108,200,000=1.082 \times 10^8$

5) A

Feedback:Any number that we can write as a decimal number, between 1.0 and 10.0, multiplied by a power of 10, is said to be in standard form. 3.25×10^8; If you observe carefully, 3.25 is a decimal number between 1.0 and 10.0 and so we have the standard form of 325,000,000 as 3.25×10^8. Similarly, $778,600,000=7.786 \times 10^8$

6) B

Feedback: Any number that we can write as a decimal number, between 1.0 and 10.0, multiplied by a power of 10, is said to be in standard form. 3.25×10^8; If you observe carefully, 3.25 is a decimal number between 1.0 and 10.0 and so we have the standard form of 325,000,000 as 3.25×10^8. Similarly, $4,495,100,000=4.4951 \times 10^9$

7) D

Feedback:28/14+42/14+56/14=2+3+4=9

8) B

Feedback: When the value of one quantity increases with respect to decrease in other or vice-versa, then they are said to be inversely proportional. It means that the two quantities behave opposite in nature. So, for fixed number of flowers, more garlands less the flowers.

9) B

Feedback: Here, 28/7+42/7+56/7=4+6+8=18

FEEDBACK CLASS :- VIII (SCIENCE)

Q. 1 The charge acquired by a glass rod when it is rubbed with silk is

(a). Negative

(b). Positive

(c). Both

(d). None

ANSWER :-1. (b). Positive

Feedback for incorrect answers

When you are rubbing a glass rod with a silk cloth, electrons are stripped away from the atoms in the glass rod and transferred to the silk cloth. This leaves the glass rod with a positive charge and the silk cloth with a negative charge.

Q.2 - The object which does not have light of its own is

(a) shining mirror

(b) light bulb

(c) star

(d) lighted match box

ANSWER :- (a) shining mirror

Feedback for incorrect answers

Mirrors can't create light, only reflect it. Normally, much of the light from an electric light is absorbed by the walls of a room (and a lot is also reflected which is why you can see!

Q.3 - Beam of light striking the reflecting surface is called

(a) incident ray

(b) reflected ray

(c) refracted ray

(d) normal ray

ANSEWR :-(b) reflected ray

Feedback for incorrect answers

A ray of light or another form of radiant energy that is thrown back from a nonpermeable or nonabsorbing surface is called a reflected ray.

Q.4 - Lightning conductor is used

(a) to destroy the buildings

(b) to protect the buildings

(c) both (a) and (b)

(d) none of these

ANSWER :- (b) to protect the buildings

Feedback for incorrect answers

The conductor which is fixed on the top of the building to protect the buildings from the damage by lightning.

Q5. **Assertion (A):** Shadow is always black.

Reason (R): A shadow only shows the outline of an object.

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true but R is not the correct explanation of A.

(c) A is true but R is false.

(d) A is false but R is true.

ANSWER:- (a) Both A and R are true and R is the correct explanation of A.

Feedback for incorrect answers

A shadow is formed when a light from a light source is obstructed by some object. When a shadow is formed it happens due to absorption of all light by an object from a light emitting source. As a result, a shadow is

produced which is due to absorption or absence of light, hence black in colour.

Q6. **Assertion (A):** When we look into the mirror, we see our own face inside the mirror.

Reason (R): Mirror is made of a transparent substance that allows the light to pass through it.

(a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.
(d) A is false but R is true.

ANSWER:- (a) Both A and R are true and R is the correct explanation of A.

Feedback for incorrect answers

Mirror is an opaque object because you can't see through it . Mirror is not a transparent object because it reflects the light which comes towards it and then we can see our reflection in the mirrors.

Q.7 The process of transfer of charges from a charged object to the earth is called

(a) lightning
(b) oscillation
(c) earthing
(d) electron movement

ANSWER:- (c) earthing

Feedback for incorrect answers

A safety measure to prevent people from getting electrical shock by electrical devices' insulation failure is called earthing.

Q. 8- Earthquake of which magnitude of the following cause the maximum damage?

(a) 3.0
(b) 8.0
(c) 5.0
(d) 4.0

ANSWER:- (b) 8.0

Feedback for incorrect answers

Earthquake magnitude
magnitude level category effects
5.0–5.9 moderate some damage to weak structures
6.0–6.9 strong moderate damage in populated areas
7.0–7.9 major serious damage over large areas; loss of life
8.0 and higher great severe destruction and loss of life over large areas.

Q.9- The point from where the shock waves of an earthquake originate is called

(a) epicenter
(b) seismic focus
(c) focal depth
(d) none of these

ANSWER:- (b) seismic focus

Feedback for incorrect answers

The focus is the place inside Earth's crust where an earthquake originates. The point on the Earth's surface directly above the focus is the epicenter. When energy is released at the focus, seismic waves travel outward from that point in all directions.

Q .10- A mirror has _____ surface.

(a) rough
(b) polished
(c) dark
(d) all of these

ANSWER:- (a) rough

Feedback for incorrect answers

A mirror is a smooth, flat, and shining surface that has the ability to reflect the light that falls on it. The word "polished" means "being shiny as a result of rubbing." This in itself explains the surface of a plane mirror, or simply a mirror. The word "rough" refers to surfaces that are irregular and smooth.

FEEDBACK CLASS :- VIII (SST)

Read the passage and give the answer of following questions: (5X1=5)

The dissatisfaction with British rule intensified in the 1870s and 1880s. The Arms Act was passed in 1878, disallowing Indians from possessing arms. In the same year, the Vernacular Press Act was also enacted in an effort to silence those who were critical of the government. The Act allowed the government to confiscate the assets of newspapers including their printing presses if the newspapers published anything that was found "objectionable". In 1883, there was a furore over the attempt by the government to introduce the Ilbert Bill. The bill provided for the trial of British or European persons by Indians, and sought equality between British and Indian judges in the country. But when white opposition forced the government to withdraw the bill, Indians were enraged. The event highlighted the racial attitudes of the British in India.

Q.1 Which of the following statement is" TRUE"

Vernacular press act was passed in 1878
This act allowed the government to confiscate the asset of newspaper.
Both are the right
None of the right

Q.2 When was passed the arms act?

1878
1778
1978
None of the above

Q.3 Which of the following statement is true

The satisfaction with British rule intensified in the 1870s and 1880s.
Arms act was allowed Indians from possessing arms.
In 1885 Ilbert bill was introduce.
People were satisfied with the British rule in the 1870s and 1880s.

Q.4 The vernacular press act was passed in-

1910
1878
1978
1777

Q.5 Choose the correct statement in given below-

Ilbert bill was introduced in 1883
The act stipulated that Indian judges could try Europeans.

British opposition force the government to withdraw the bill

All of the above correct

According to the given picture answer the following questions-

Q.6 What is saying this cartoon?

points

It's really cruel burdening kids like this. I had to h
boy to help my son!

Cartoon is trying to convey how child labour work in our society.
Cartoon is trying to convey how balance in our society
In this cartoon a poor woman help a school student
None of the above right

Q.7 According to above picture which fundamental right abolished?
points
Right to speak
Right to constitutional remedies
Right to equality
All of the above

According to the given picture answer the following questions

Q 8. Which type facilities showing in given picture?

points

Social facilities
Transportation facilities
Industrial facilities
Nono of the above

Q.9 In the given picture these facilities fall in the-
points

private facilities
Public facilities
Both of the above
None of the above

Q.10 public facilities provided by the-

Businessman
Politician
Government
All of the above