EMMANUEL MISSION SR SEC SCHOOL, BEAWAR

ONLINE CLASSES

WEEK – 37 (05.11.2020)

CLASS – VIII

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English: https://youtu.be/S9OFjjph2JQ

Hindi: https://youtu.be/81vAyAIu83s

Mathematics: https://youtu.be/7xhEyzHtXAo
Mathematics: Kindly see below

General Science: Kindly see below

Social Studies: Kindly see below

Sanskrit: Kindly see below

Computer Science: https://youtu.be/OteAxpKylUk

General Knowledge: https://youtu.be/FUHQFNrhxtU

Moral Science: Kindly see below

Physical Education: https://youtu.be/aYuZPsLh9AQ

Music (Guitar): https://youtu.be/6nA2IEhbHA4

Music (Keyboard): https://youtu.be/W65PT51E1SE

Health & Sanitation: https://youtu.be/4ArMwDwFpiY

Art Education: https://youtu.be/83xl4hk1yDk

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EMMANUEL MISSION SR SEC SCHOOL, BEAWAR
MATHEMATICS
CLASS – VIII
Revision : Chapter –1. Rational Numbers

Chapter 6 Square and Square root

Exercise 6.3

1. What could be the possible 'one's' digits of the square root of each of the following numbers?

i. 9801 ii. 99856 iii. 998001 iv. 657666025

Solution:

i. We know that the unit's digit of the square of a number having digit as unit's place 1 is 1 and also 9 is 1[9^2=81 whose unit place is 1].

∴ Unit's digit of the square root of number 9801 is equal to 1 or 9.

ii. We know that the unit's digit of the square of a number having digit as unit's place 6 is 6 and also 4 is 6 [6^2=36 and 4^2=16, both the squares have unit digit 6].

∴ Unit's digit of the square root of number 99856 is equal to 6.

iii. We know that the unit's digit of the square of a number having digit as unit's place 1 is 1 and also 9 is 1[9^2=81 whose unit place is 1].

∴ Unit's digit of the square root of number 998001 is equal to 1 or 9.

iv. We know that the unit's digit of the square of a number having digit as unit's place 5 is 5.

∴ Unit's digit of the square root of number 657666025 is equal to 5.

2. Without doing any calculation, find the numbers which are surely not perfect squares.

i. 153 ii. 257 iii. 408 iv. 441

Solution:

We know that natural numbers ending with the digits 0, 2, 3, 7 and 8 are not perfect square.

i. 153⟹ Ends with 3.

∴, 153 is not a perfect square

ii. 257⟹ Ends with 7

∴, 257 is not a perfect square

iii. 408⟹ Ends with 8

∴, 408 is not a perfect square

iv. 441⟹ Ends with 1

∴, 441 is a perfect square.

3. Find the square roots of 100 and 169 by the method of repeated subtraction.

Solution:

100

100 – 1 = 99

99 – 3 = 96

96 – 5 = 91

91 – 7 = 84

84 – 9 = 75

75 – 11 = 64

64 – 13 = 51

51 – 15 = 36

36 – 17 = 19

19 – 19 = 0

Here, we have performed subtraction ten times.

∴ √100 = 10

169

169 – 1 = 168

168 – 3 = 165

165 – 5 = 160

160 – 7 = 153

153 – 9 = 144

144 – 11 = 133

133 – 13 = 120

120 – 15 = 105

105 – 17 = 88

88 – 19 = 69

69 – 21 = 48

48 – 23 = 25

25 – 25 = 0

Here, we have performed subtraction thirteen times.

∴ √169 = 13

4. Find the square roots of the following numbers by the Prime Factorisation Method.

i. 729 **ii. 400** **iii. 1764** **iv. 4096**

v. 7744 **vi. 9604** **vii. 5929** **viii. 9216**

ix. 529 **x. 8100**

Solution:

i.

3	729
3	243
3	81
3	27
3	9
3	3
	1

729 = 3×3×3×3×3×3×1

⇒ 729 = (3×3)×(3×3)×(3×3)

$\Rightarrow 729 = (3\times3\times3)\times(3\times3\times3)$

$\Rightarrow 729 = (3\times3\times3)^2$

$\Rightarrow \sqrt{729} = 3\times3\times3 = 27$

ii.

2	400
2	200
2	100
2	50
5	25
5	5
	1

$400 = 2\times2\times2\times2\times5\times5\times1$

$\Rightarrow 400 = (2\times2)\times(2\times2)\times(5\times5)$

$\Rightarrow 400 = (2\times2\times5)\times(2\times2\times5)$

$\Rightarrow 400 = (2\times2\times5)^2$

$\Rightarrow \sqrt{400} = 2\times2\times5 = 20$

iii.

2	1764
2	882
3	441
3	147
7	49
7	7
	1

$1764 = 2\times2\times3\times3\times7\times7$

$\Rightarrow 1764 = (2\times2)\times(3\times3)\times(7\times7)$

$\Rightarrow 1764 = (2\times3\times7)\times(2\times3\times7)$

$\Rightarrow 1764 = (2\times3\times7)^2$

$\Rightarrow \sqrt{1764} = 2\times3\times7 = 42$

iv.

2	4096
2	2048
2	1024
2	512
2	256
2	128
2	64
2	32
2	16
2	8
2	4
2	2
	1

4096 = 2×2×2×2×2×2×2×2×2×2×2×2

⇒ 4096 = (2×2)×(2×2)×(2×2)×(2×2)×(2×2)×(2×2)

⇒ 4096 = (2×2×2×2×2×2)×(2×2×2×2×2×2)

⇒ 4096 = $(2×2×2×2×2×2)^2$

⇒ √4096 = 2×2×2 ×2×2×2 = 64

v.

2	7744
2	3872
2	1936
2	968
2	484
2	242
11	121
11	11
	1

7744 = 2×2×2×2×2×2×11×11×1

⇒ 7744 = (2×2)×(2×2)×(2×2)×(11×11)

⇒ 7744 = (2×2×2×11)×(2×2×2×11)

⇒ 7744 = $(2×2×2×11)^2$

⇒ √7744 = 2×2×2×11 = 88

vi.

2	9604
2	4802
7	2401
7	343
7	49
7	7
	1

9604 = 62 × 2 × 7 × 7 × 7 × 7

⇒ 9604 = (2 × 2) × (7 × 7) × (7 × 7)

⇒ 9604 = (2 × 7 ×7) × (2 × 7 ×7)

⇒ 9604 = $(2×7×7)^2$

⇒ √9604 = 2×7×7 = 98

vii.

7	5929
7	847
11	121
11	11
	1

5929 = 7×7×11×11

⇒ 5929 = (7×7)×(11×11)

⇒ 5929 = (7×11)×(7×11)

⇒ 5929 = $(7\times11)^2$

⇒ √5929 = 7×11 = 77

viii.

2	9216
2	4608
2	2304
2	1152
2	576
2	288
2	144
2	72
2	36
2	18
3	9
3	3
	1

9216 = 2×2×2×2×2×2×2×2×2×2×3×3×1

⇒ 9216 = (2×2)×(2×2) × (2 × 2) × (2 × 2) × (2 × 2) × (3 × 3)

⇒ 9216 = (2 × 2 × 2 × 2 × 2 × 3) × (2 × 2 × 2 × 2 × 2 × 3)

⇒ 9216 = 96 × 96

⇒ 9216 = $(96)^2$

⇒ √9216 = 96

ix.

23	529
23	23
	1

529 = 23×23

529 = $(23)^2$

√529 = 23

x.

2	8100
2	4050
3	2025
3	675
3	225
3	75
5	25
5	5
	1

8100 = 2×2×3×3×3×3×5×5×1

⇒ 8100 = (2×2) ×(3×3)×(3×3)×(5×5)

⇒ 8100 = (2×3×3×5)×(2×3×3×5)

$\Rightarrow 8100 = 90\times90$

$\Rightarrow 8100 = (90)^2$

$\Rightarrow \sqrt{8100} = 90$

5. For each of the following numbers, find the smallest whole number by which it should be multiplied so as to get a perfect square number. Also find the square root of the square number so obtained.

i. 252 ii. 180 iii. 1008 iv. 2028

v. 1458 vi. 768

Solution:

i.

2	252
2	126
3	63
3	21
7	7
	1

$252 = 2\times2\times3\times3\times7$

$= (2\times2)\times(3\times3)\times7$

Here, 7 cannot be paired.

∴ We will multiply 252 by 7 to get perfect square.

New number = $252 \times 7 = 1764$

2	1764
2	882
3	441
3	147
7	49
7	7
	1

$1764 = 2\times2\times3\times3\times7\times7$

$\Rightarrow 1764 = (2\times2)\times(3\times3)\times(7\times7)$

$\Rightarrow 1764 = 2^2\times3^2\times7^2$

$\Rightarrow 1764 = (2\times3\times7)^2$

$\Rightarrow \sqrt{1764} = 2\times3\times7 = 42$

ii.

2	180
2	90
3	45
3	15
5	5
	1

180 = 2×2×3×3×5

= (2×2)×(3×3)×5

Here, 5 cannot be paired.

∴ We will multiply 180 by 5 to get perfect square.

New number = 180 × 5 = 900

2	900
2	450
3	225
3	75
5	25
5	5
	1

900 = 2×2×3×3×5×5×1

⇒ 900 = (2×2)×(3×3)×(5×5)

⇒ 900 = $2^2 \times 3^2 \times 5^2$

⇒ 900 = $(2 \times 3 \times 5)^2$

⇒ $\sqrt{900} = 2 \times 3 \times 5 = 30$

iii.

2	1008
2	504
2	252
2	126
3	63
3	21
7	7
	1

1008 = 2×2×2×2×3×3×7

= (2×2)×(2×2)×(3×3)×7

Here, 7 cannot be paired.

∴ We will multiply 1008 by 7 to get perfect square.

New number = 1008×7 = 7056

2	7056
2	3528
2	1764
2	882
3	441
3	147
7	49
7	7
	1

7056 = 2×2×2×2×3×3×7×7

⇒ 7056 = (2×2)×(2×2)×(3×3)×(7×7)

⇒ 7056 = $2^2 \times 2^2 \times 3^2 \times 7^2$

⇒ 7056 = $(2 \times 2 \times 3 \times 7)^2$

⇒ $\sqrt{7056} = 2 \times 2 \times 3 \times 7 = 84$

iv.

2	2028
2	1014
3	507
13	169
13	13
	1

2028 = 2×2×3×13×13

= (2×2)×(13×13)×3

Here, 3 cannot be paired.

∴ We will multiply 2028 by 3 to get perfect square. New number = 2028×3 = 6084

2	6084
2	3042
3	1521
3	507
13	169
13	13
	1

6084 = 2×2×3×3×13×13

⇒ 6084 = (2×2)×(3×3)×(13×13)

⇒ 6084 = $2^2 \times 3^2 \times 13^2$

⇒ 6084 = $(2 \times 3 \times 13)^2$

⇒ $\sqrt{6084} = 2 \times 3 \times 13 = 78$

v.

2	1458
3	729
3	243
3	81
3	27
3	9
3	3
	1

1458 = 2×3×3×3×3×3×3

= (3×3)×(3×3)×(3×3)×2

Here, 2 cannot be paired.

∴ We will multiply 1458 by 2 to get perfect square. New number = 1458 × 2 = 2916

2	2916
2	1458
3	729
3	243
3	81
3	27
3	9
3	3
	1

2916 = 2×2×3×3×3×3×3×3

⇒ 2916 = (3×3)×(3×3)×(3×3)×(2×2)

⇒ 2916 = $3^2 \times 3^2 \times 3^2 \times 2^2$

⇒ 2916 = $(3 \times 3 \times 3 \times 2)^2$

⇒ $\sqrt{2916} = 3 \times 3 \times 3 \times 2 = 54$

vi.

2	768
2	384
2	192
2	96
2	48
2	24
2	12
2	6
3	3
	1

768 = 2×2×2×2×2×2×2×2×3

= (2×2)×(2×2)×(2×2)×(2×2)×3

Here, 3 cannot be paired.

∴ We will multiply 768 by 3 to get perfect square.

New number = 768×3 = 2304

2	2304
2	1152
2	576
2	288
2	144
2	72
2	36
2	18
3	9
3	3
	1

$2304 = 2\times2\times2\times2\times2\times2\times2\times2\times3\times3$

$\Rightarrow 2304 = (2\times2)\times(2\times2)\times(2\times2)\times(2\times2)\times(3\times3)$

$\Rightarrow 2304 = 2^2\times2^2\times2^2\times2^2\times3^2$

$\Rightarrow 2304 = (2\times2\times2\times2\times3)^2$

$\Rightarrow \sqrt{2304} = 2\times2\times2\times2\times3 = 48$

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SCIENCE

CLASS – VIII

Self Assessment

Chapter : Combustion And Flame

Multiple Choice Questions:

1 The zone of no combustion in a candle flame is the
(a) Non-luminous zone (b) dark inner zone (c) luminous zone (d) all of these

2 Unburnt carbon particles are released on combustion of
(a) Solid fuels (b) gaseous fuels (c) liquid fuels (d) all of these

3 The gas present in the atmosphere which helps in the combustion of substances is
(a) hydrogen (b) nitrogen (c) oxygen (d) carbon dioxide

Fill in the blanks:

1 An ideal fuel should burn at a _____rate to produce a large amount of heat.
2 _____ occurs when a cracker is ignited.
3 _____is a supporter of combustion since it helps a combustible substance to burn..

State weather the statements are true (T) or False (F) :

1 Oxygen is produced by complete combustion of a fuel . ( )
2 LPG has a higher ignition temperature than coal. ( )
3 Alcohol and petrol are inflammable substances. ( )

Short –answer type questions:

1 What is acid rain?
2 Define combustion.
3 Explain the principle on which a fire extinguisher works.

Long – answer type questions:

1 (a) What are the harmful effects of acid rain?
(b) How is acid rain caused?

2 (a) Why is it not safe to burn a coal fire in a closed room?
(b) 2 kg of a fuel is burnt to produce 45,000 kJ of energy. Calculate the calorific value of the fuel.

EMMANUEL MISSION SR SEC SCHOOL, BEAWAR
SOCIAL STUDIES (History)
CLASS – VIII
Chapter 6- Colonialism and Urban Change

Q1. Tick the correct answers
Answers – 1. Chennai
2. Mumbai
3. Kolkata
4. Edwin Lutyens
Q2. Fill in the blanks
Answers - 1. Parliament house
2. Dalhousie
3. Secretarait
4. Madras
5. September 1803
6. Calcutta
Q3Write true false of the following
Answers
1. True
2. False
3. False
4. True
5. False
Q4 Match the following
1----------4
2----------3
3----------2
4---------1

Q1. What led to deurbanisation during the early years of British occupation of India?
Answer. The cause of deurbanisation during the early years of British occupation of India were the change in the method of trading as well as decline in the demand of the products.

Many towns were destroyed or abondoned

Towns lost their glory with decline in demand for their products

Old trading centers were replaced by new trade centers

Important cities like Madras were destroyed.

Q2. Give an account of the rise of new cities of Madras, Calcutta and Bombay.

1. In the late eighteenth century; Calcutta, Bombay and Madras rose in importance as they became the Presidency cities. These three cities became the centres of British power in different regions of India.
2. Around the same time, many smaller cities declined in importance because of a drop in the demand for what they produced. When the flow of trade moved to new centre, old trading centres and ports could not survive.
3. Delhi had been the centre of power for over thousand years; but with some gaps in between. Right from the days of the Rajput kings up to the Mughal dynasty, Delhi used to be the centre of power. Cities developed in different parts on the left bank of river Yamuna during the reign of different dynasties. Remnants of all those cities can still be seen in different parts of the modern Delhi.

Q3.Name the new buildings erected by the British in Delhi.
Answer: India Gate.

- The All India War Memorial Arch, also known as the India Gate is one of the monuments builtby the British.
- Parliament House.
- Rashtrapati Bhawan
- The secretariat
- The Connaught Place

Q4. How did the Old City of Delhi change under British rule?
Answer: 1The British wanted Delhi to forget its Mughal past.
2 The area around the Fort was completely cleared of gardens, pavilions, and mosques (temples were left intact) for security reasons.

- Mosques in particular were either destroyed or put to other uses.
- The Zinat-al-Masjid was converted into a bakery.
- No worship was allowed in the Jama Masjid for five years.
- One-third of the city was demolished.
- Its canals were filled up.
- In the 1870s, the western walls of Shahjahanabad were broken to establish the railways and to allow the city to expand beyond the walls.
- The Delhi College was turned into a school and shut down in 1877.

3 The British now began living in the sprawling Civil Lines away from the Indians in the Walled City.

Q 5 Why did the British choose to hold a grand Durbar in Delhi although it was not a capital?
Answer:
After the revolt of 1857, numerous events took place in Delhi.

- In 1877, Viceroy Lytton organized a Durbar to acknowledge Queen Victoria as the Empress of India.
- Calcutta was still the capital of British India, but the grand Durbar was being held in Delhi because, during the Revolt, the British realized the importance of the Mughal emperor to the people.
- It was therefore important to celebrate British power with pomp and show in Delhi.

Q6 How was life in Delhi affected by the Partition of the country?
Answer 6 The Partition of India in 1947 led to a massive transfer of populations on both sides of the new border. As a result, the population of Delhi swelled, the kinds of jobs people did changed, and the culture of the city became different. ... Thousands of people in Delhi were killed and their homes looted and burned.
Migration from Punjab changed the social character of Delhi. A new culture developed with new tastes and sensibilities.

EMMANUEL MISSION SR SEC SCHOOL, BEAWAR

SANSKRIT

CLASS – VIII

एकादशः पाठः - भारतीयः नार्यः

अभ्यासः

1.अधोलिखितहिन्दीपदानां संस्कृते शुद्धं समानार्थकं (√) इति चिह्नेन चिह्नानीकुरुत-

(i) ग. (ii) ख. (iii) ग. (iv) क. (v) ग

2.एकपदेन उत्तरत-

(i) कुप्रथाः

(ii) सर्वोत्तमं

(iii) किरण बेदी

(iv) देवताः

(v) त्यागस्य

3.पूर्णवाक्येन उत्तरत-

(i) नारी विषये अलिखित्-"यत्र नार्यस्तु पूज्यन्ते रमन्ते तत्र देवताः।"

(ii) अद्यत्वे भारतीयाः नार्यः विविधक्षेत्रेषु नारीशक्तेः सर्वात्तमं प्रदर्शनं कुर्वन्ति।

(iii)समाजसुधारकैः बालविवाहः सतीप्रथा च कुप्रथाः समाप्ताः ।

(iv)कुप्रथाणां निवारणाय सर्वकारस्य, समाजसेविसंगठनानां, पुरुषवर्गस्य च सम्मिलितं प्रयासं अपेक्ष्यते।

(v) स्वतन्त्रतायैः कमलानेहरू, कस्तूरबागांधी, सरोजिनी नायडू आदयः महिलाः कारागारं अगच्छन्।

4.रेखाकिंतपदानि आधृत्य प्रश्ननिर्माणं कुरुत-

(i)काः सर्वषु क्षेत्रेषु अग्रे वर्धन्ते?

(ii)इमाः महिलाः कस्यै कारागारमगच्छन्?

(iii) किरणबेदी कैः पुरस्कृता?

(iv) पुरा नार्यः किं अपि अकुर्वन् ?

(v) नार्यः केषु सर्वोत्तमं प्रदर्शनं कुर्वन्ति ?

5.मंजूषातः उचितपदं चित्वा रिक्तस्थानानि पूरयत

(i) अधिकांशाः

(ii)वीराः

(iii) एकस्मिन्

(iv) शिक्षिता

(v) सर्वेषु

6. *

7.अधोलिखितानां वाक्यानां संस्कृतभाषायां अनुवादं कुरुत-

(i)अम्बा स्वादिष्टभोजनं भोजनं पचति ।

(ii) प्राचीनकाले गार्गी अपि मन्त्रान् अरचयत्।

(iii) गायिकायां लतामंगेश्कर श्रेष्ठतमा अस्ति।

(iv) अरून्धतीराय एका प्रसिद्धा समाजसेविका अस्ति।

(v)सोनल मानसिहः एका कुशलाः नृत्यागना अस्ति ।

EMMANUEL MISSION SR SEC SCHOOL, BEAWAR

MORAL SCIENCE

CLASS – VIII

Chapter :- 13: "Avoid Niggardliness And Extravagance"

EXERCISE :

(A) Answer the following:

Q1. How does the behaviour of miser and spendthrift affect his family's life?

Ans. He was denying his family from their right to enjoy life. They allow their families only the basic necessities of life. They do not allow any pleasures or any other form of amusement.

Q2. What is niggardliness ? How is it harmful to the society ?

Ans. Niggardliness means characters manifests itself in many spheres. Only the petty minded and niggardly person does not believe in extending Charity to the unfortunate. Hi usually complaints that all Charity drives and appeal for help just money making rackets. He forget that he is twice blessed to give rather than to receive.

Q3. Who is spendthrift ?

Ans. A Spendthrift is one who foolishly and wastefully squanders all money.

Q4. What is the best way to handle money ?

Ans. The best way to handle money is to use it in a responsible way.

(B) Explain the following lines :

Q1. Many homes have broken due to the head of the family being a spendthrift.

Ans. The spendthrift is not concerned with his responsibility towards the house and his family. He allows a dependent to go without the necessities of life because of his improvident way. It is dangerous to be associated with this kind of person. He can ruin anybody. Many homes have broken due to the head of the family living a spendthrift.

Q2. He forgets that he is twice blessed to give rather that to receive.

Ans. Only the petty minded and niggardly person does not believe in extending Charity to the unfortunate. He usually complaints that all charity drives and appeal for help are just money making rackets. He forget that he is twice blessed to give rather than to receive.

Q3. Niggardliness of character manifest itself in many sphere.

Ans. Niggardliness means character manifests itself in many sphere . The first Sphere is home . There are some men who allow their families only the basic necessities of life. They do not allow any pleasure or any other forms of amusement for their children. Usually, it is not due to the poverty but because of their attitude towards life. They think that money should not be used to enjoy life.

(C) Fill in the blanks:-

1. Another context where niggardliness is obvious is_____.
2. Misers are dislike in_____ .
3. A spendthrift is one who_____and _____ squandered all money.
4. The best way to handle money is to use it in a_____ way.
5. Spending money with_____ is an art.

Ans.1. Charity , 2. Social life , 3. Foolishly ,wastefully ,4. Responsible 5. Maturity.

(D)True and false :

1. Ibrahim was a successful doctor of the city.
2. Everybody recognized him as the poorest man in the entire city.
3. Yusuf Ali did not earn much.
4. He was working in a hospital.
5. He had four children and his parents also live with him.

Ans.1. (F) , 2.(F) , 3.(T) , 4.(F) , 5. (T)