

Dear Parents,



Session 2018-2019 is progressing quite well. We just had our 'Orientation Session' with Primary, Middle and Secondary schoolers parents and it was heartening to see your approach, co-operation and support. APS family extends gratitude for it.

A warm welcome to students who have joined our school this session. We stand committed to providing quality education to our children. The teachers follow a detailed plan of instruction that is guided by CBSE and AWES. SAMC is our pillar of strength as our teachers focus on holistic development of our students. We shall certainly continue to implement our 'Systems Approach' to support all students by using interventions to help each child make academic progress. Progress is best assured when student, parents and school are working towards same goal. It's like when every player is an active member, the team is sure to be the best and everyone is a winner. So let's strive to be all winners!

For Summer Break Assignments, practice sheets are devised to ensure revisions for coming assessment. Kindly go to the website: www.apsbinnaguri.org and follow these steps for the same

Steps to download:

- i. Browse the website→ Home page (first page of the website)
- ii. Then check the Bulletin Board→ link will be available.

OR

Home Page→ Click on 'APS News' option→ Choose Holiday Homework option from the dropdown menu.

We would also seek your co-operation to help lift up academics. We would welcome parents to offer their names for substitute facilitators/ teachers, judges for events round the year. Kindly e-mail at apsbinnaguril@gmail.com or give your details at Front Desk.

We truly believe that an entire community is needed to empower our students to become successful citizens. I look forward to a great year and working with such an amazing community.

Awaiting your constructive suggestions.



ARMY PUBLIC SCHOOL BINNAGURI
MATHEMATICS PRACTICE SHEET - 1, SESSION 2018-19
CLASS: VII

TIME:
Date:

MM: 25
Duration: _____ to _____

CHAPTER 3 → DATA HANDLING.

SECTION-A

Q1. A cricketer scores the following runs in eight innings:

58, 76, 40, 35, 46, 45, 0, 100. Find the mean score.

Q2. Find the mode of the given set of numbers: 1, 1, 2, 4, 3, 2, 1, 2, 2, 4

Q3. Ashish studies for 4 hours, 5 hours and 3 hours respectively on three consecutive days. How many hours does he study daily on an average?

Q4. A batsman scored the following number of runs in six innings:

36, 35, 50, 46, 60, 55

Calculate the mean runs scored by him in an inning.

Q5. Find the median of the data: 24, 36, 46, 17, 18, 25, 35

SECTION-B

Q6. Find the mean of the first five whole numbers.

Q7. Find the mode of the following data:

12, 14, 12, 16, 15, 13, 14, 18, 19, 12, 14, 15, 16, 15, 16, 16, 15, 17, 13, 16, 16, 15, 15, 13, 15, 17, 15, 14, 15, 13, 15, 14

Q8. Heights (in cm) of 25 children are given below:

168, 165, 163, 160, 163, 161, 162, 164, 163, 162, 164, 163, 160, 163, 16, 165, 163, 162, 163, 164, 163, 160, 165, 163, 162

What is the mode of their heights? What do we understand by Mode here?

Q9. A box contains pairs of socks of two colours (black and white). I have picked out a white sock. I pick out one more with my eyes closed. What is the probability that it will make a pair?

Q10. A coin is flipped to decide which team starts the game. What is the probability that your team will start?

SECTION-C

Q11. The weights (in kg.) of 15 students of a class are:

38, 42, 35, 37, 45, 50, 32, 43, 43, 40, 36, 38, 43, 38, 47

(i) Find the mode and median of this data.

(ii) Is there more than one mode?

Q12. There are 6 marbles in a box with numbers from 1 to 6 marked on each of them.

(i) What is the probability of drawing a marble with number 2?

(ii) What is the probability of drawing a marble with number 5?

Q13. The marks (out of 100) obtained by a group of students in a science test are 85, 76, 90, 85, 39, 48, 56, 95, 81 and 75. Find the:

- (i) Highest and the lowest marks obtained by the students.
- (ii) Range of the marks obtained.
- (iii) Mean marks obtained by the group.

Q14. The rainfall (in mm) in a city on 7 days of a certain week was recorded as follows:

Day	Mon	Tue	Wed	Thurs	Fri	Sat	Sun
Rainfall (in mm)	0.0	12.2	2.1	0.0	20.5	5.5	1.0

- (i) Find the range of the rainfall in the above data.
- (ii) Find the mean rainfall for the week.
- (iii) On how many days was the rainfall less than the mean rainfall.

Q15. Following are the margins of victory in the football matches of a league.

1, 3, 2, 5, 1, 4, 6, 2, 5, 2, 2, 2, 4, 1, 2, 3, 1, 1, 2, 3, 2,
6, 4, 3, 2, 1, 1, 4, 2, 1, 5, 3, 3, 2, 3, 2, 4, 2, 1, 2

Find the mode of this data using tally bars.

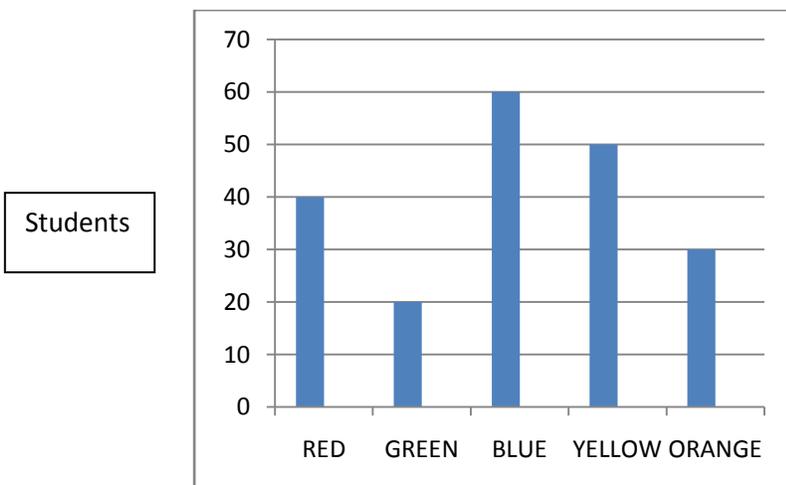
SECTION -D

Q16. Following data gives total marks (out of 600) obtained by six children of a particular class. Represent the data on a bar graph.

Students	Ajay	Bali	Dipti	Faiyaz	Geetika	Hari
Marks Obtained	450	500	300	360	400	540

Q17. Answer the following questions with the help of the bar graph:

- (i) Which is the most preferred colour and which is the least preferred?
- (ii) How many colours are there in all? What are they?



Q18. The performance of students in 1st Term and 2nd Term is given. Draw a double bar graph choosing appropriate scale and answer the following:

Subject	English	Hindi	Maths	Science	S. Science
1st Term (M.M. 100)	67	72	88	81	73
2nd Term (M.M. 100)	70	65	95	85	75

- (i) In which subject, has the child improved his performance the most?
- (ii) In which subject is the improvement the least?
- (iii) Has the performance gone down in any subject?.

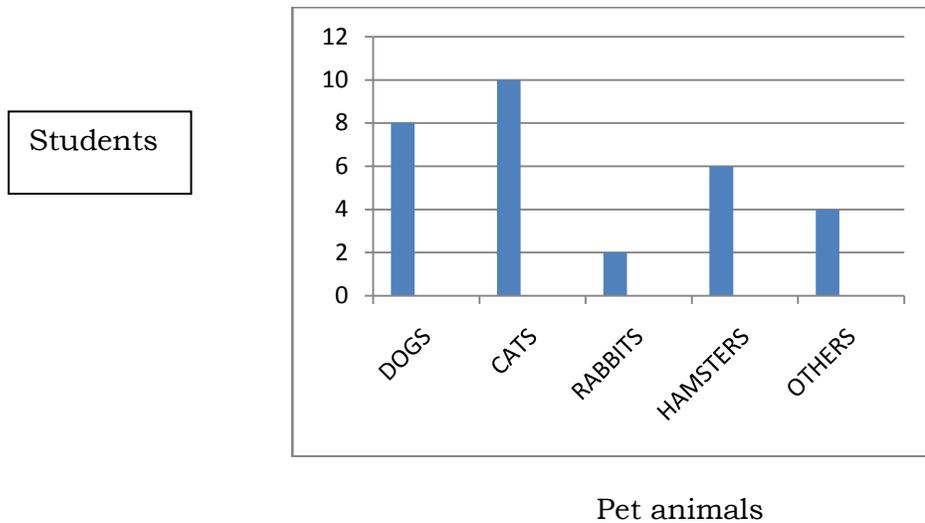
Q19. The number of children in six different classes of a school is given below. The results are shown in the following table :

Classes	Fifth	Sixth	Seventh	Eighth	Ninth	Tenth
No. of children	135	120	95	100	90	80

Represent the given data on a bar graph.

Q20. Use the bar graph to answer the following questions.

- (a) Which is the most popular pet? (b) How many students have dog as a pet?
- (c) How many students have cats as a pet? (d) Which is the least popular pet?



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ARMY PUBLIC SCHOOL BINNAGURI
MATHEMATICS PRACTICE SHEET - 2, SESSION 2018-19
CLASS: VII

TIME:

MM: 25

Date:

Duration: _____ **to** _____

CHAPTER 2 → FRACTIONS AND DECIMALS

SECTION-A

Q1. Express $27 + \frac{4}{10} + \frac{7}{100}$ in decimals.

Q2. Find $2\frac{5}{10} \times 2$

Q3. Convert $\frac{5}{10}$ to its simplest form.

Q4. Find:

$$0.3 \times 6$$

Q5. Find:

$$0.5 \div 1000$$

SECTION-B

Q6. Express as rupees using decimals: 77 rupees 77 paise

Q7. What number should be subtracted from 30 to get 23.709 ?

Q8. Find what fraction of an hour is 35 minutes?

Q9. Simplify:

$$\left(\frac{1}{4} \text{ of } 2\frac{2}{7} \right) \div \frac{3}{5}$$

Q10. Convert the following fractions into equivalent like fractions:

$$\frac{7}{8}, \frac{17}{12}, \frac{41}{45}$$

SECTION-C

Q11. Simplify the following: $7\frac{3}{4} - 3\frac{5}{6} + \frac{7}{8}$

Q12. Find the area of a rectangle whose length is 5.7 cm and breadth is 3.5 cm.

Q13. The cost of one metre cloth is Rs 38.50. Find the cost of 3.6 m cloth.

Q14. Write the natural numbers from 3 to 19. What fraction of them are even numbers?

Q15. An ornament is made of gold and copper and weights 52 grams. If $\frac{2}{13}$ of its part is copper, find the weight of pure gold in it.

SECTION -D

Q16. Dinesh went from place A to place B and from there to place C. A is 7.5 km from B and B is 12.7 km from C. Ayub went from place A to place D and from there to place C. D is 9.3 km from A and C is 11.8 km from D. Who travelled more and by how much?

Q17. In a class of 40 students, $\frac{1}{5}$ of the total number of students like to study English and $\frac{2}{5}$ of the total number of students like to study Mathematics and remaining like to study Science.

- (i) How many students like to study English?
- (ii) How many students like to study Mathematics?
- (ii) What fraction of the total number of students like to study science?

Q18. Rihu bought 5 kg 300 g apples and 3 kg 250 mangoes. Rehana bought 4 kg 800g oranges and 4 kg 150 g bananas. Who bought more fruits and by how much?

Q19. I read $\frac{4}{9}$ of a book on one day and $\frac{3}{5}$ of the remaining next day. If 100 pages of book were still left unread, how many pages did the book contain?

Q20. Riya and Priya went for a picnic. Their mother gave them a water bag that contained 5 litres of water. Riya consumed $\frac{2}{5}$ of the water. Priya consumed the remaining water.

- (i) How much water did Riya drink?
- (ii) What fraction of the total quantity of water did Priya drink?

ARMY PUBLIC SCHOOL BINNAGURI
MATHEMATICS PRACTICE SHEET - 3, SESSION 2018-19
CLASS: VII

TIME:

MM: 25

Date:

Duration: _____ **to** _____

CHAPTER 1 → INTEGERS

SECTION-A

- Q1. Write a pair of integer whose sum gives zero.
- Q2. Find the reciprocal of 8
- Q3. Arrange the following integers in descending order: -31,19,-20,0,21
- Q4. $0 \times (-17)$
- Q5. Find the value of $300 + (-530)$.

SECTION-B

- Q6. Verify $a - (-b) = a + b$ for the values of $a=28, b=11$
- Q7. Evaluate $51 - (-21) - 72$.
- Q8. Verify $a \times b = b \times a$ for the values of $a=5, b=10$
- Q9. Simplify:

$$(-8) \times [(-2) + (-1)]$$

- Q10. Find the product: $(-1) \times (-2) \times (-3) \times 4$

SECTION-C

- Q11. Solve by using property: $(-25) \times 37 \times 4$
- Q12. Verify the following:

$$(-21) \times [(-4) + (-6)] = [(-21) \times (-4)] + [(-21) \times (-6)]$$

- Q13. Find the product, using suitable properties:

$$625 \times (-35) + (-625) \times 65$$

- Q14. Verify $a - (-b) = a + b$ for the following values of a and b .

$$a = 21, b = 18$$

- Q15. In a quiz, team A scored $-40, 10, 0$ and team B scored $10, 0, -40$ in three successive rounds. Which team scored more?

SECTION -D

- Q16. A water tank has steps inside it. A monkey is sitting on the topmost step (i.e., the first step). The water level is at the ninth step.
- (i) He jumps 3 steps down and then jumps back 2 steps up. In how many jumps will he reach the water level?
- (ii) After drinking water, he wants to go back. For this, he jumps 4 steps up and then jumps back 2 steps down in every move. In how many jumps will he reach back the top step?
- Q17. Suppose we represent the distance above the ground by a positive integer and that below the ground by a negative integer, then answer the following:
- (i) An elevator descends into a mine shaft at the rate of 5 metre per minute. What will be its position after one hour?

(ii) If it begins to descend from 15 m above the ground, what will be its position after 45 minutes?

Q18. A cement company earns a profit of Rs.8 per bag of white cement sold and loss Rs.5 per bag of grey cement sold.

(i) The company sells 3000 bags of white cement and 5000 bags of grey cement in a month. What is its profit or loss?

(ii) What is the number of white cement bags it must sell to have neither profit nor loss, if the number of grey bags sold is 6,400 bags.

Q19. A shopkeeper earns a profit of Re 1 by selling one pen and incurs a loss of 40 paise per pencil while selling pencils of her old stock.

(i) In a particular month she incurs a loss of Rs 5. In this period, she sold 45 pens. How many pencils did she sell in this period?

(ii) In the next month she earns neither profit nor loss. If she sold 70 pens, how many pencils did she sell?

Q20. In a class test containing 10 questions, 5 marks are awarded for every correct answer and (-2) marks are awarded for every incorrect answer and 0 for questions not attempted.

(i) Mohan gets four correct and six incorrect answers. What is his score?

(ii) Reshma gets five correct answers and five incorrect answers, what is her score?

(iii) Heena gets two correct and five incorrect answers out of seven questions she attempts. What is her score?

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ARMY PUBLIC SCHOOL BINNAGURI
PRACTICE SHEET 4, 2018-19
SUB: MATHEMATICS
CLASS – VII

CHAPTER 1 – INTEGERS

Section - A

1. Check if $25 \times (-21) = (-25) \times 21$ and state the property.
2. Explain integers are closed under subtraction with suitable examples.
3. The predecessor of -2 is _____
4. When zero is subtracted from an integer, we get _____.
5. When 0 is divided by (- 10) , we get _____.

Section - B

6. Find $6 \times (-19)$
7. Identify whether it is a magic square or not.

5	-1	-4
-5	-2	7
0	3	-3

8. Suppose we represent the distance above the ground by a positive integer and that below the ground by a negative integer, then answer the following:
 - a) An elevator descends into a mine shaft at the rate of 5 meter per minute. What will be its position after one hour?
 - b) If it begins to descend from 15m above the ground, what will be its position after 45 minutes?
9. Evaluate
 - a) $0 \div 12$
 - b) $(-31) \div [(-30) + (-1)]$
10. Fill the blank columns to get the sum of 10 in the magic square..

	-4	-3	
	5		2
3	1		6
		9	-5

11. A certain freezing process requires that room temperature be lowered from 38°C at the rate of 5°C every hour. What will be the room temperature 5 hours after the process begins?

Section - C

12. Find the product using suitable properties.
 - a) $8 \times 53 \times (-125)$
 - b) $26 \times (-48) + (-48) \times (-36)$
 - c) $(-17) \times (-29)$
13. Match the following

Column A	Column B
(i) $(-1) \times 0 \times (-5)$	(a) -1
(ii) The additive inverse of (-9)	(b) 9
(iii) $(-3) \div (+3)$	(c) 0

14. Verify distributive property if i) $a = 18$, $b = 7$, $c = 3$
ii) $a = 10$, $b = 6$, $c = -2$
15. Find the value of $[(-212) \times (-1) \times 0] + (-3) \times 3$
16. Simplify $17 - \{8 \div (2 \times 3 - 4)\}$

Section - D

17. Evaluate $[(-6) + 5] \div [(-2) + 1]$
18. Evaluate $45 - [38 - (60 \div 3 - (6 - 9 \div 3) \div 3)]$
19. Verify $37 \times [6 + (-3)] = 37 \times 6 + 37 \times (-3)$
20. Evaluate $(-59) \div 59$
21. Simplify $6 - \{5 \times 3 - (-12) \times 16 \div (-8)\}$

ARMY PUBLIC SCHOOL BINNAGURI
PRACTICE SHEET 6, 2018-19
SUB: MATHEMATICS
CLASS – VII

Chapter -3 Data Handling

Section – A

- The ages in years of 10 teachers of a school are :
32, 41, 28, 54, 35, 26, 23, 33, 38, 40
 - What is the age of the oldest teacher and that of the youngest teacher?
 - What is the range of the ages of the teachers?
- The difference between the highest observation and lowest observation is called _____.
- A coin is flipped to decide which team starts the game. What is the probability that your team will start?
- The range of the data $-3, 4, -5, 1, -2, 0$ is 9. Check the answer.
- Define mean and mode.

Section - B

- A cricketer scores the following runs in eight innings:

58, 76, 40, 35, 46, 45, 0, 100.

Find the mean score.

- In a packet there are five flash cards:

1	2	3	4	5
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What is the probability of drawing a flash card bearing 2?

- Dice { a cube having 6 faces with numbers 1 to 6} is thrown. Find the probability of number 5.
- Find the mean of the first five whole numbers.
- Find the mode and median of the data :
13, 16, 12, 14, 19, 12, 14, 13, 14

Section - C

- The runs scored in a cricket match by 11 players is as follows:

6, 15, 120, 50, 100, 80, 10, 15, 8, 10, 15

Find the mean, median, mode of this data.

- Heights of 25 children (in cm) in a school are given as follows

168, 165, 163, 160, 163, 161, 162, 164, 163, 162, 163, 164, 160, 163, 163, 165, 163, 162, 163, 164, 163, 160, 165, 163, 162.

Find the mean, median, mode.

- A box contains 3 defective mangoes and 21 good mangoes. One mango is drawn from the box at random. Find the probability of getting

(i) a defective mango

(ii) a good mango

- The number of children in six different classes of school is given below. Represent the data by a graph.

Classes	Fifth	Sixth	Seventh	Eight	Nineth	Tenth
Number of Children	135	120	95	100	90	80

15. The performance of a student in first and second term is given below. Draw a double bar graph choosing appropriate scale.

Subject	English	Hindi	Maths	Science	Social studies
First term (MM :100)	67	72	88	81	73
Second term (MM : 100)	70	65	95	85	75

Section - D

16. A coin is tossed once. Find the probability of getting

(i) a head

(ii) a tail

17. In a school, there are five sections of class VII. The number of students in each section is given below. Construct a bar graph representing data.

Section	A	B	C	D	E
Number of student	40	48	52	45	30

18. Consider this data collected from a survey of a colony.

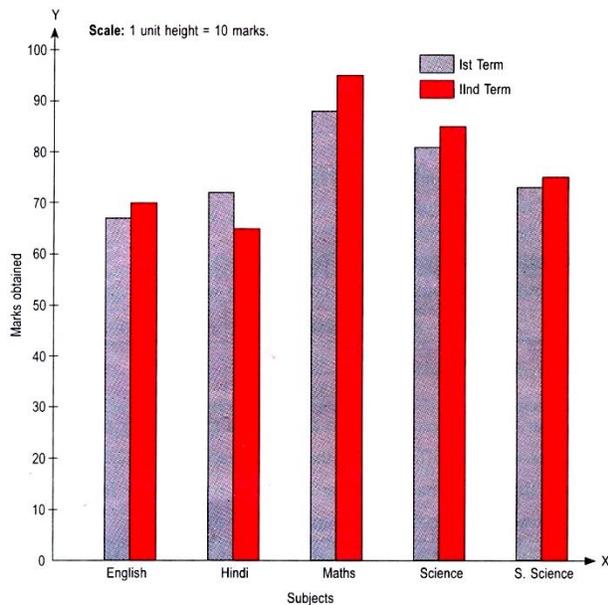
Favorite Sport	Cricket	Basket ball	Swimming	Hockey	Athletics
Watching	1240	470	510	430	250
Participating	620	320	320	250	105

i) Draw a double bar graph choosing an appropriate scale.

ii) Which sport is most popular?

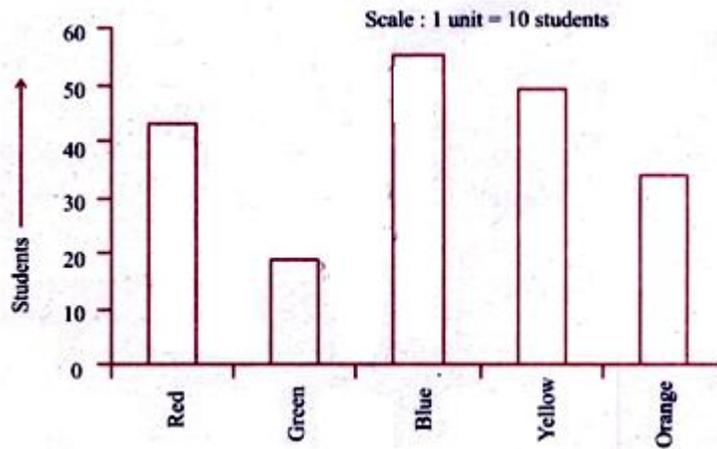
iii) Which is more preferred, watching or participating in sports?

19. The performance of a student is given below in graph form



- i) In which subject has the student improved his performance the most?
- ii) In which subject is the improvement least?
- iii) Has the performance gone down in any subject?
- iv) What does the graph represent?

20. Two hundred students of class 6 and 7 were asked to name their favourite colour . The results are shown in graph



- i) Which is the most preferred color?
- ii) Which is the least preferred color?
- iii) How many colors are there in all? What are they?
- iv) What is the difference between the class intervals?
