



# ICATS MATHEMATICS CONTEST 2019



**QUESTION BOOKLET**

**GRADE 3 & 4  
KIDS**

*Time Allowed: 75 Mins.  
Maximum Marks: 75*



INTERNATIONAL  
**CATS CONTESTS**

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## **ICATS MATHEMATICS CONTEST 2019**

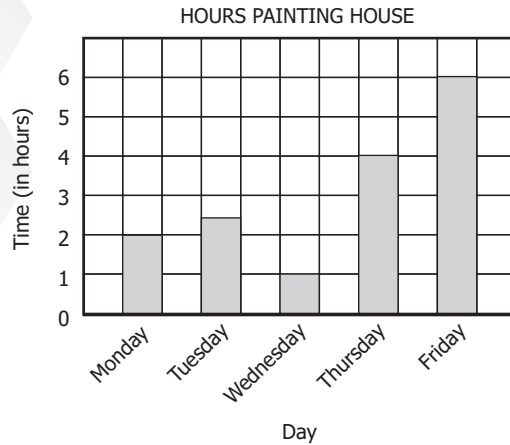
### **KIDS (GRADE 3 & 4)**

**TIME ALLOWED : 75 MINUTES, MAXIMUM MARKS : 75**  
**TOTAL QUESTIONS : 25 MCQS**

#### **INSTRUCTIONS**

1. DON'T START ATTEMPTING THE PAPER UNTIL INSTRUCTED BY THE INVIGILATORS.
2. INSTRUCTIONS FROM THE EXAMINATION INVIGILATORS MUST BE CARRIED OUT PROMPTLY.
3. CAREFULLY RECHECK YOUR NAME, FATHER NAME, SCHOOL NAME, ADDRESS ETC AT THE BUBBLE SHEET / ANSWER SHEET.
4. RECORD ALL ANSWERS ON THE BUBBLE SHEET ONLY. SELECT BEST ANSWER FROM THE FOUR GIVEN OPTIONS AND MARK ONLY ONE OPTION IN EACH QUESTION.
5. USE BLUE / BLACK INK TO FILL UP THE CIRCLES FOR YOUR ANSWERS ON THE BUBBLE SHEET. USE OF LEAD PENCIL IS NOT ALLOWED.
6. USE OF ANY HELPING MATERIAL INCLUDING CELL PHONES AND ELECTRONIC DEVICES IS STRICTLY PROHIBITED.
7. EVERY CORRECT ANSWER EARNS THREE POINTS. THERE WOULD BE NEGATIVE MARKING. ONE POINT WOULD BE DEDUCTED FOR EVERY INCORRECT ANSWER.
8. CANDIDATES MAY NOT LEAVE THE EXAMINATION ROOM UNESCORTED FOR ANY REASON, AND THIS INCLUDES USING THE WASHROOM.
9. NO MATERIALS OR ELECTRONIC DEVICES SHALL BE BROUGHT INTO THE ROOM.
10. THERE ARE FIVE CATEGORIES OF THE CONTEST AS UNDER:
  - A. TODDLERS (GRADE 1 & 2)
  - B. KIDS (GRADE 3 & 4)
  - C. JUNIORS (GRADE 5 & 6)
  - D. JUVENILES (GRADE 7 & 8)
  - E. ADOLESCENTS (GRADE 9 & 10 / O-LEVELS)
11. ONLY REGISTERED STUDENTS CAN PARTICIPATE IN THE CONTEST.
12. NO CANDIDATE SHALL TAKE OUT OF THE HALL ANY ANSWER BOOK(S) OR PART OF AN ANSWER BOOK, WHETHER USED OR UNUSED, OR OTHER SUPPLIED MATERIAL.
13. IF A PARTICIPANT DOES NOT UNDERSTAND A WORD OR PHRASE ON THE EXAM PAPER, NEITHER EXAMINER NOR INVIGILATOR IS PERMITTED TO ANSWER.
14. FOR INFORMATION ABOUT UPCOMING CONTESTS OR PROVIDING VALUABLE FEEDBACK, PLEASE VISIT [WWW.CATSCONTESTS.ORG](http://WWW.CATSCONTESTS.ORG)
15. ANY ACADEMIC MISCONDUCT OR MALPRACTICE MUST BE REPORTED TO INTERNATIONAL CATS CONTESTS AT [INFO@CATSCONTESTS.ORG](mailto:INFO@CATSCONTESTS.ORG)

**Q1.** Mr. Ahmad is painting his house. The graph below shows how many hours he spent painting during 5 days.



How many more hours did Mr. Ahmad spend painting his house on Friday than on Wednesday?

**A** 4

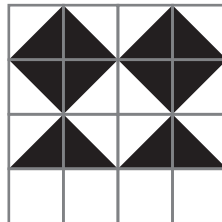
**B** 5

**C** 6

**D** 7



**Q2.** The diagram below shows the pattern Ali is using to put tiles on his floor.



Which row of tiles is the *missing* row from Ali's floor?



**Q3.** Ms. Rehana's class and Mr. Ali's class are competing in a school Read-A-Thon.

BOOKS READ EACH WEEK

Week	Ms. Rehana's Class	Mr. Ali's Class
1	10	8
2	9	10
3	13	12

According to the table, which statement is true?

- A** In 3 weeks Mr. Ali's class read more books than Ms. Rehana's class.
- B** In the first 2 weeks Mr. Ali's class read more books than Ms. Rehana's class.
- C** Ms. Rehana's class read fewer books during week 1 than Mr. Ali's class read during week 1.
- D** Ms. Rehana's class read the same number of books during week 1 as Mr. Ali's class read during week 2.



**Q4.** Which statement describes the pattern of the shapes shown below?



- A** Add 1 side, then subtract 2 sides.
- B** Add 2 sides, then subtract 1 side.
- C** Subtract 1 side, then add 2 sides.
- D** Subtract 2 sides, then add 1 side.

**Q5.** In the year 2000, there were 4,690,107 children under the age of 18 living in New York State. What is the value of the 6 in the number 4,690,107?

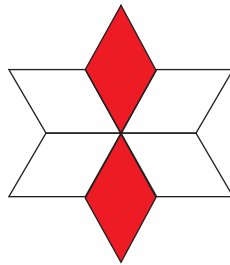
**A** 6 thousands

**B** 6 ten thousands

**C** 6 hundred thousands

**D** 6 millions

**Q6.** What fraction of the figure below is shaded?



**A**  $\frac{1}{4}$

**B**  $\frac{2}{4}$

**C**  $\frac{2}{6}$

**D**  $\frac{4}{6}$

**Q7.** Mrs. Brown rewards her students by putting a star next to their name on the notice board. For every 5 stars a student earns, the student gets a prize. Brenda got 3 prizes last month. What is the least number of stars Brenda must have earned to get 3 prizes?

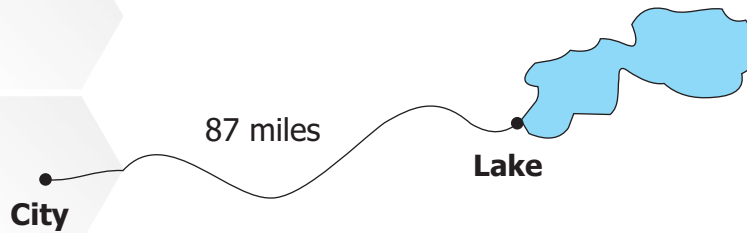
**A** 5

**B** 8

**C** 10

**D** 15

- Q8.** Ali and Ahmad went on a bicycle trip. It took them 3 days to ride the 87 miles from City to Lake. They traveled the same number of miles each day.

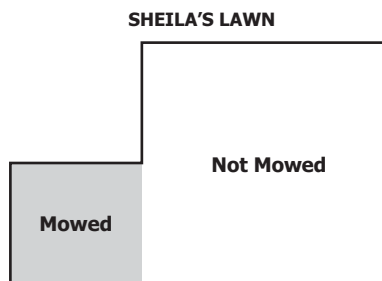


How many miles did they travel each day?

- A** 21                      **B** 25                      **C** 29                      **D** 33



- Q9.** Sheila is mowing her lawn. It has taken her 10 minutes to mow the area of her lawn shown on the diagram below.



About how many minutes will it take Sheila to mow the rest of her lawn?

- A** 20 minutes                      **B** 30 minutes                      **C** 40 minutes                      **D** 50 minutes

**Q10.** Two trains leave from Camden and arrive in Rockford, as shown in the timetable below.

TRAIN TIMETABLE

Train	Leaves Camden	Arrives Rockford
Express	5:10 P.M.	5:40 P.M.
Local	5:30 P.M.	6:20 P.M.

How many more minutes does it take the Local train than the Express train to go from Camden to Rockford?

**A** 20

**B** 30

**C** 40

**D** 50



**Q11.** Approximately how many matchsticks long is the pencil?



**A** 4

**B** 2

**C** 3

**D** 5

- Q12.** A store was having a sale on cans of tennis balls. For every 2 cans bought, the store gives the customer 1 more can for free. There are 3 tennis balls in each can.



**SALE**

**Tennis Balls**

**Buy 2 Cans  
Get 1 Free!!**



When Atif came home from the store, he had 18 tennis balls in his shopping bag. How many of these tennis balls did he get for free?

- A** 2                      **B** 6                      **C** 12                      **D** 18



- Q13.** Sughra's mother bought 6 bags of fruit at the grocery store.



What fractional part of the bags is red?

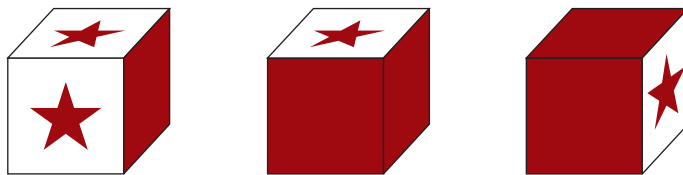
- A**  $\frac{1}{6}$                       **B**  $\frac{2}{6}$                       **C**  $\frac{3}{6}$                       **D**  $\frac{4}{6}$



**Q14.** Which of these 475-milliliter bottles has about 200 milliliters of water in it?



**Q15.** Each of the 3 blocks below has a star on 3 of its 6 sides.



What is the total number of stars that cannot be seen on the blocks above?

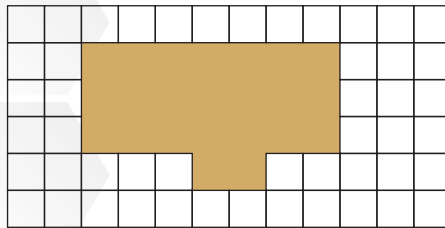
**A** 2


**B** 4

**C** 5

**D** 9

**Q16.** What is the area, in square units, of the shaded shape on the grid below?



KEY	
	= 1 square unit

**A** 22

**B** 23

**C** 28

**D** 72



**Q17.** The box has a weight of 40 kilograms. What could be the weight of 1 can?



**A** 40 kilograms

**B** 10 kilograms

**C** 8 kilograms

**D** 6 kilograms

- Q18.** The table below shows the number of tickets for the school play that were sold each day.

**SCHOOL PLAY TICKETS**

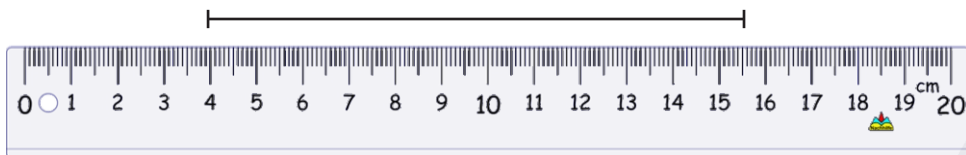
Day	Number of Tickets Sold
Thursday	238
Friday	361
Saturday	249
Sunday	328

On which day does the number of tickets sold round to 300, when rounded to the nearest hundred?

- A** Thursday      **B** Friday      **C** Saturday      **D** Sunday



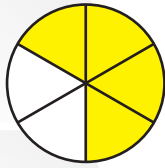
- Q19.** Taylor is measuring leaves for an art project.



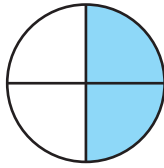
What is the length of this leaf?

- A**  $10\frac{1}{4}$  cm      **B**  $11\frac{1}{2}$  cm      **C**  $11\frac{1}{4}$  cm      **D**  $12\frac{1}{2}$  cm

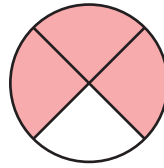
**Q20.** Students shaded the shapes below to represent fractions.



Britney



Keisha



Ivan



Walter

**Which two students' shapes represent equivalent fractions?**

- A** Britney's fraction is equivalent to Walter's fraction.
- B** Keisha's fraction is equivalent to Walter's fraction.
- C** Ivan's fraction is equivalent to Keisha's fraction.
- D** Ivan's fraction is equivalent to Britney's fraction.



**Q21.** Ammara wants to buy a notebook for Rs. 2.15, a pack of glue sticks for Rs. 5.08, and a pack of pens for Rs. 3.08. What is the total cost of the three items Ammara wants to buy?

- A** Rs. 10.75
- B** Rs. 10.31
- C** Rs. 10.23
- D** Rs. 10.11



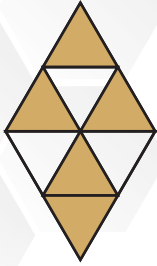
**Q22.** Umer created the number pattern below by adding the same amount each time to get the next number.

**20, 40, 60, 80, . . . ?**

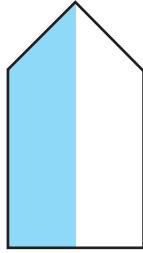
**What will be the eighth number in the pattern?**

- A** 160
- B** 240
- C** 320
- D** 640

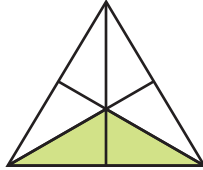
**Q23.** Four students each drew a figure. Each student shaded part of the figure to represent a fraction.



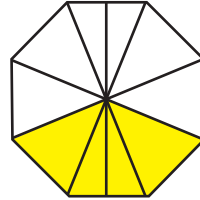
Selena



Tara



Carson



Erik

**Which sentence about the figures is true?**

**A** Selena shaded  $\frac{5}{8}$  of her figure.

**B** Tara shaded  $\frac{1}{1}$  of her figure.

**C** Carson shaded  $\frac{2}{4}$  of his figure.

**D** Erik shaded  $\frac{5}{3}$  of his figure.



**Q24.** Mr. Hammad owns a flower shop. At the beginning of the day, he had 152 roses. Mr. Hammad sold 96 of the roses and then wanted to separate the rest of the roses equally among 8 vases. What will be the total number of roses in each vase?

**A** 7

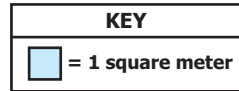
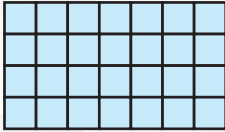
**B** 12

**C** 48

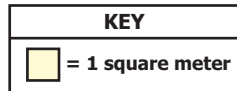
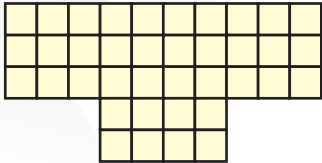
**D** 56

**Q25.** Mr. Jameel built a deck. The deck had an area of 29 square meters. Which figure could represent the deck?

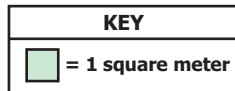
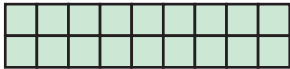
**A**



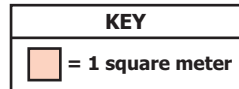
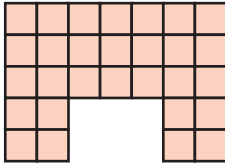
**B**



**C**



**D**



National Toppers  
ICATS  
Science Contest  
2018

*Congratulations*

Student Name	Father Name	Grade	School
ALI RIAZ	RIAZ AHMAD	1	BEACONHOUSE SCHOOL SYSTEM (PRIMARY CAMPUS)
FILZA ALI	ALI RAZA	2	ARMY PUBLIC SCHOOL COD
M. ZARAR HAIDER	FAHEEM HASSAN	3	MEEZAN SCHOOL (MAIN CAMPUS)
IMAD AHMAD	BAHARUDDIN	4	ARMY PUBLIC SCHOOL & COLLEGE SWAT
WANIA ALI	SAFDAR ALI	4	LAHORE GRAMMAR SCHOOL (LANDMARK PROJECT)
QASIM RASOOL	FAIZ UR RASOOL	4	ARMY BURN HALL COLLEGE FOR GIRLS
M. RAFFAY KUNDI	AFIF NASEER KUNDI	5	THE SCIENCE SCHOOL
AYESHA JUNAID	MUHAMMD JUNAID	5	LAHORE GRAMMAR SCHOOL
ARYAN HASSAN	AFARASAYAB HASSAN	5	THE CITY JUNIOR SECTION CANAL
TAHER MURTAZA	MURTAZA BHINDERWALA	6	MSB EDUCATIONAL INSTITUTE
AREEJ AMIR	AMIR MASOOD	7	KARACHI PUBLIC SCHOOL
MUHAMMAD ALI	MUHAMMAD NAVEED	8	THE SCIENCE SCHOOL
ZOIBA RIAZ	RIAZ HUSSAIN	9	THE CITY SCHOOL RAHIM YAR KHAN
WAJAHAT MIRZA	ARIF MEHMOOD	10	KOHINOOR GRAMMAR SCHOOL & COLLEGE

National Toppers  
ICATS  
IT Contest  
2018

*Congratulations*

Student Name	Father Name	Grade	School
NOOR FATIMA	IMRAN ALI	1	HALIMAH SCHOOL OF EXCELLENCE
MUHAMMAD AFAQ	TAYYAB GHAFFAR	2	MEEZAN SCHOOL (CITY CAMPUS)
UMAR YOUSAF	MUHAMMAD YOUSAF	3	ARMY PUBLIC SCHOOL GARRISON JUNIOR LAHORE CANTT
AAN ZAHRA RANA	RANA	3	ARMY PUBLIC SCHOOL (GIRLS BRANCH)
RIDA YASIR	M. YASIR SALEEM	4	THE CITY SCHOOL (GULSHAN JUNIOR CAMPUS)
MUHAMMAD HAMIZ	MUHAMMAD ADIL	5	AL-QALAM GRAMMAR SCHOOL HAJIWALA
WAJAHAT ALI SHAFIQ	MUHAMMAD SHAFIQ	6	QUAID E AZAM DIVISIONAL PUBLIC SCHOOL
NASHRAH	SHEHZAD	7	GUARDS PUBLIC SCHOOL
ANEES HAMID	HAMID BASHIR	8	PAK TURK INTERNATIONAL SCHOOL AND COLLEGE
LAIBA GABOL	SALEEM GABOL	9	HABIB GIRLS' SCHOOL
AHMED ALI	M. AUN	10	MSB EDUCATIONAL INSTITUTE

Compete  
if you are the best