



# **FSP MATHEMATICS CONTEST 2022**

## **QUESTION BOOKLET GRADE 5 & 6**

**VIBRANT YOUNGSTERS**

**TIME ALLOWED: 75 Mins.**

**Maximum Marks: 60**



**INTERNATIONAL FAMOUS STUDENTS PLATFORM  
VIBRANT YOUNGSTERS COMPETITIONS**



# INSTRUCTIONS

- 1) DON'T START ATTEMPTING THE PAPER UNTIL INSTRUCTED BY THE INVIGILATOR.
- 2) INSTRUCTIONS FROM THE EXAMINATION INVIGILATOR 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 IN TO THE ROOM.
- 10) THERE ARE FIVE CATEGORIES OF THE CONTEST AS UNDER:
  - A) VIBRANT YOUNGSTERS (GRADE 1 & 2)
  - B) VIBRANT YOUNGSTERS (GRADE 3 & 4)
  - C) VIBRANT YOUNGSTERS (GRADE 5 & 6)
  - D) VIBRANT YOUNGSTERS (GRADE 7 & 8)
  - E) VIBRANT YOUNGSTERS (GRADE 9 & 10 / 0-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 [fspcompetitions.org](https://fspcompetitions.org)
- 15) ANY ACADEMIC MISCONDUCT OR MALPRACTICE MUST BE REPORTED TO FSP VIBRANT YOUNGSTERS AT [info@fspcompetitions.org](mailto:info@fspcompetitions.org)



1) 92 people ride the train to work each day. After the train stops at the train station, only 36 people are still on the train. How would you justify the number of students who were dropped off at the train station?

- (A) 65 people were dropped off at the train station because  $92 - 36 = 65$
- (B) 56 people were dropped off at the train station because  $92 + 36 = 56$
- (C) 56 people were dropped off at the train station because  $92 - 36 = 56$
- (D) 56 people were dropped off at the train station because  $92 - 36 = 92 + 36$

2) Which operation would be used to solve the problem? There are 20 students in Mr. Adam's class. Each student has 5 dollars. How much money is there in all?

- (A) Addition
- (B) Subtraction
- (C) Multiplication
- (D) Division

3) The Electronics Experts store sold 8,124 computers last year. The store also sold 2,336 printers. How many computers and printers did the store sell last year?

- (A) 10,460
- (B) 10,640
- (C) 10,840
- (D) 10,940

4) Out of 52, 62, 70, 82, 78, 66, the numbers that have 13 as factors are:

- (A) 52, 78
- (B) 66, 78
- (C) 70, 78
- (D) 62, 82

5) In a proper order, the first four factors of 80 are:

- (A) 1, 2, 3, 4, 5
- (B) 1, 2, 4, 5, 8
- (C) 1, 3, 5, 10, 20
- (D) 1, 2, 3, 5, 10

6) What percentage of the images are sleds?



- (A) 25%
- (B) 30%
- (C) 70%
- (D) 75%

7) Which statement correctly compares the percentage of images that are skates to skis?



- (A) 25% are skates and 50%50% are skis
- (B) 25% are skates and 75%75% are skis
- (C) 50% are skates and 25%25% are skis
- (D) 75% are skates and 25%25% are skis



8) Dining room sets are discounted as shown on the sale tag.



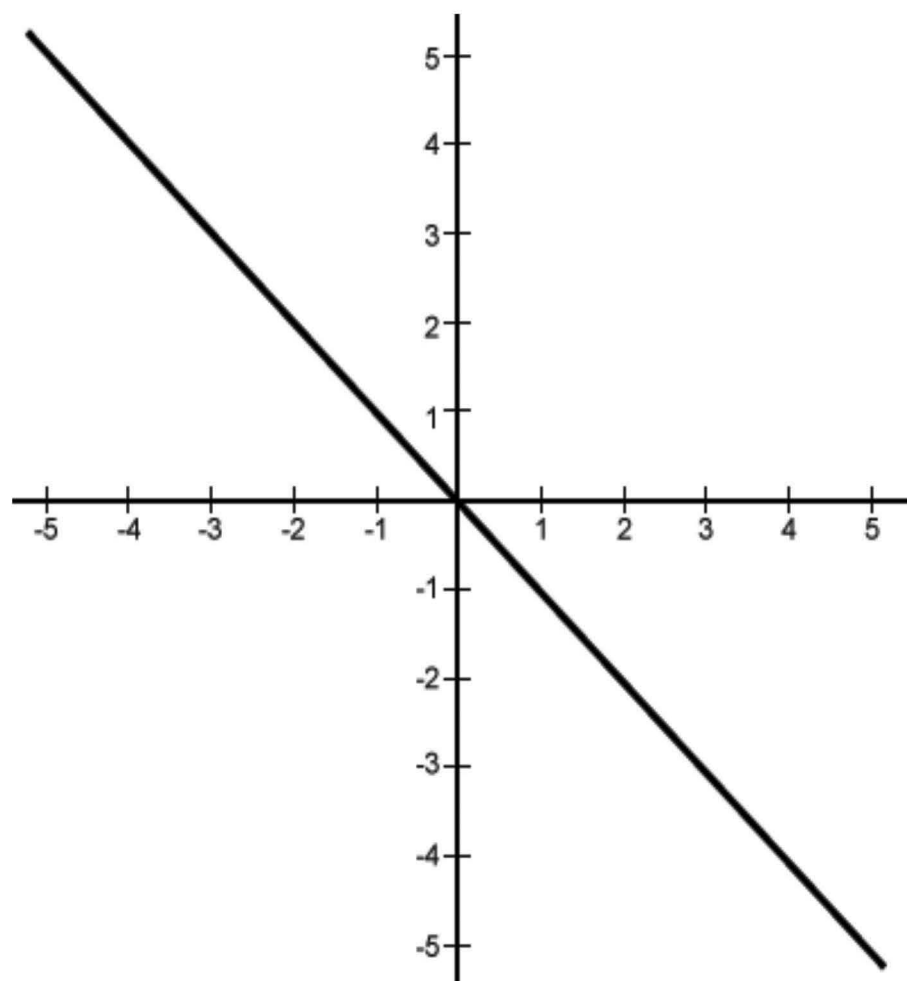
Before the discount, a table costs \$1190 & a chair costs \$245. What is the discounted price of a dining room set that includes 1 table & 6 chair?

- (A) \$1,064
- (B) \$1,596
- (C) \$2,184
- (D) \$2,660

9) What is the fraction 7/20 as a decimal & a percent?

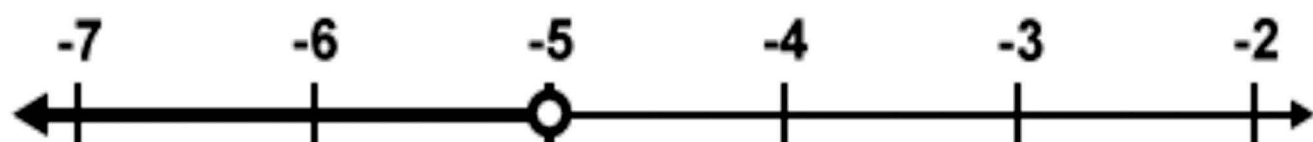
- (A) 0.035 and 3.5%
- (B) 7 and 70%
- (C) 0.35 and 35%
- (D) 0.07 and 7%

10) A car travels 1 meter per second.



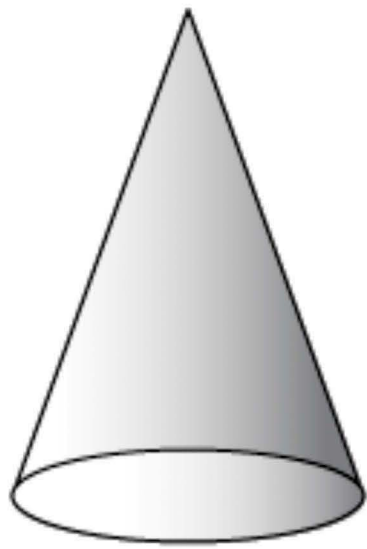
- (A) The graph describes the speed of the car.
- (B) The graph slope of the graph is steeper then the speed of the car.
- (C) The slope of the graph is the inverse of the speed of the car.
- (D) There is no relationship between the slope of the graph and the speed of the car.

Q.11) What does the open circle represent on the inequality graph?



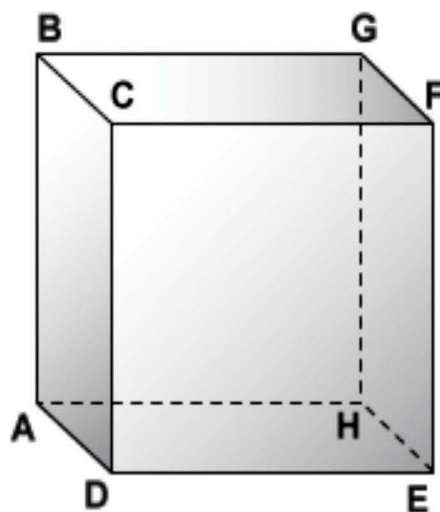
- (A) EQUAL TO the number that is graphed
- (B) NOT EQUAL TO the number that is graphed
- (C) Both are correct
- (D) Both are incorrect

12) What is the approximate volume of a cone with a radius of 4 cm and a height of 7 cm?



- A) 29 cm cubed
- B) 117 cm cubed
- C) 268 cm cubed
- D) 352 cm cubed

13) A prism measures 4 unit cubes along side AD. 6 unit cubes along side DE, & 6 unit cubes along side CD. What is the volume of the prism?

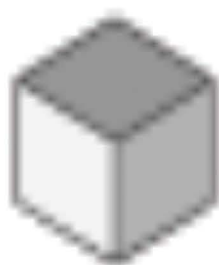


- (A) 16 cubic units
- (B) 24 cubic units
- (C) 36 cubic units
- (D) 144 cubic units

14) How many 1-inch cubes can fit into a box that measures 10 inches by 2 inches by 4 inches, without gaps or empty spaces?

- (A) 16 cubes
- (B) 24 cubes
- (C) 80 cubes
- (D) 124 cubes

15) The cube shown has a side length of 1 unit.



What is the volume of the cube?

- (A) 1 cubic unit
- (B) 1 square unit
- (C) 6 cubic units
- (D) 6 square units



**16) A large cube is formed from the material obtained by melting three smaller cubes of 3, 4 & 5 cm side. What is the ratio of the total surface areas of the smaller cubes and the large cube?**

- (A) 2 : 1                      (B) 3 : 2                      (C) 25 : 18                      (D) 27 : 20

**17) 3 Volume of a cuboid is  $1176 \text{ cm}^3$ , its length and breadth are 12cm and 7cm respectively. What is the height of the cuboid?**

- (A) 24 cm                      (B) 11 cm                      (C) 14 cm                      (D) 20 cm

**18) Which operation should you do first when you simplify  $85 + (25 \times 5)$ ?**

- (A) Addition                      (B) Subtraction                      (C) Multiplication                      (D) Division

**19) The \_\_\_\_\_ in an expression are addition, subtraction, multiplication, & division.**

- (A) Sequence  
(B) Terms  
(C) Operations  
(D) Numerical expressions

**20) Any number that can be made by dividing one integer by another. The word comes from "ratio".**

- (A) Compatible Numbers  
(B) Rational Numbers  
(C) Whole Numbers  
(D) Digits

**21) These are numbers that are "well-matched". Numbers that are friendly with each other. For example, 6 divided by 3 equals 2 with no remainders.**

- (A) Whole numbers  
(B) All fractions  
(C) Compatible Numbers  
(D) Digits

**22) What is prime number?**

- (A) A factor shared by two numbers  
(B) One of two or more numbers that divides into a larger number without a remainder  
(C) A number that is divisible by  $x$  is also said to be a multiple of  $x$   
(D) An integer that does not have any factors besides itself and 1

**23) Roberto needs to know the net weight of the package he is mailing in order to calculate the amount of postage he will pay. If the package contains 12 copies of a report that weigh 37.3 grams each, what is the total weight of the package?**

- (A) 447.6 grams  
(B) 424.7 grams  
(C) 398.7 grams  
(D) 49.3 grams



**24) Abigail is taking a sewing class. Her first assignment is to stitch together 41 identical fabric rectangles from end to end to create a banner. If each rectangle measure 8.9 centimeters in length, what will be the length of the completed banner?**

- (A) 362.6 cm                      (B) 332.6 cm                      (C) 364.9 cm                      (D) 376.8 cm

**25) The fastest lap ever run at Atlanta Motor Speedway is 194.690 mph & the fastest lap ever run at Daytona International Speedway is 196.434 mph. How much faster is the lap at Daytona than at Atlanta?**

- (A) 2.744 mph                      (B) 1.844 mph                      (C) 2.764 mph                      (D) 1.744 mph

**26) The round off value of 2300/1055 to the nearest whole number is:**

- (A) 23                      (B) 20                      (C) 21                      (D) 22

**27) Round 1902 to the nearest hundred.**

- (A) 1800                      (B) 1850                      (C) 1920                      (D) 1900

**28) Round 1,345,465.997 to the nearest whole number.**

- (A) 2,000,000.0  
(B) 1,345,765.9  
(C) 1,345,466  
(D) 1,345,800

**29) I purchased 10 liters of milk in the morning and 5 liters of milk in the evening. If the milk costs ₹ 30 per liter, how much money will I have to pay to the milkman?**

- (A) ₹ 450  
(B) ₹ 300  
(C) ₹ 150  
(D) none of these.

**30) Three clocks ring once at the same time. After that, the first clock rings after every 90 minutes, the second after every 30 minutes, and the third after every 60 minutes. After how many minutes will they again all ring together?**

- (A) 90 minutes  
(B) 120 minutes  
(C) 180 minutes  
(D) None of these

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**Best of Luck!**





# ANSWER SHEET

## INSTRUCTIONS:

- This is a generic answer sheet to be used by participants of all grades. Students of Grade 1-2 will fill in circles of first 20 questions. Grade 3-4 will fill in circles of 25 questions & Grade 5-10 will fill in circles of 30 questions.
- Please recheck your Name, Father Name, Garde & School written below, the same would appear at your certificate.
- Use of lead pencil is not allowed.
- Use only Black / Blue ink to fill in the circles.

Choose only ONE of the FOUR proposed answers (A,B,C or D) & fill in the circles with your answer.

Example of correctly filled table of answers.

A

B

D

Correct Filling Answer "C"

A

B

X

D

wrong filling

A

B

✓

D

wrong filling

A

B

D

wrong filling

A

B

●

D

wrong filling

A

B

●

C

wrong filling

Q. No.	Answer			
1	<div>A</div>	<div>B</div>	<div><div></div></div>	<div>D</div>
2	<div>A</div>	<div>B</div>	<div><div></div></div>	<div>D</div>
3	<div><div></div></div>	<div>B</div>	<div>C</div>	<div>D</div>
4	<div><div></div></div>	<div>B</div>	<div>C</div>	<div>D</div>
5	<div>A</div>	<div><div></div></div>	<div>C</div>	<div>D</div>
6	<div>A</div>	<div><div></div></div>	<div>C</div>	<div>D</div>
7	<div>A</div>	<div><div></div></div>	<div>C</div>	<div>D</div>
8	<div>A</div>	<div><div></div></div>	<div>C</div>	<div>D</div>
9	<div>A</div>	<div>B</div>	<div><div></div></div>	<div>D</div>
10	<div>A</div>	<div>B</div>	<div><div></div></div>	<div>D</div>
11	<div>A</div>	<div><div></div></div>	<div>C</div>	<div>D</div>
12	<div>A</div>	<div><div></div></div>	<div>C</div>	<div>D</div>
13	<div>A</div>	<div>B</div>	<div>C</div>	<div><div></div></div>
14	<div>A</div>	<div>B</div>	<div><div></div></div>	<div>D</div>
15	<div><div></div></div>	<div>B</div>	<div>C</div>	<div>D</div>

Q. No.	Answer			
16	<div>A</div>	<div>B</div>	<div><div></div></div>	<div>D</div>
17	<div>A</div>	<div>B</div>	<div><div></div></div>	<div>D</div>
18	<div>A</div>	<div>B</div>	<div><div></div></div>	<div>D</div>
19	<div>A</div>	<div>B</div>	<div><div></div></div>	<div>D</div>
20	<div>A</div>	<div><div></div></div>	<div>C</div>	<div>D</div>
21	<div>A</div>	<div>B</div>	<div><div></div></div>	<div>D</div>
22	<div>A</div>	<div>B</div>	<div>C</div>	<div><div></div></div>
23	<div><div></div></div>	<div>B</div>	<div>C</div>	<div>D</div>
24	<div>A</div>	<div>B</div>	<div><div></div></div>	<div>D</div>
25	<div>A</div>	<div>B</div>	<div>C</div>	<div><div></div></div>
26	<div>A</div>	<div>B</div>	<div>C</div>	<div><div></div></div>
27	<div>A</div>	<div>B</div>	<div>C</div>	<div><div></div></div>
28	<div>A</div>	<div>B</div>	<div><div></div></div>	<div>D</div>
29	<div><div></div></div>	<div>B</div>	<div>C</div>	<div>D</div>
30	<div>A</div>	<div>B</div>	<div><div></div></div>	<div>D</div>





## **INTERNATIONAL FAMOUS STUDENTS PLATFORM VIBRANT YOUNGSTERS COMPETITIONS**

**FSP Vibrant Youngsters A Project of Famous Stationary & Paper products.  
We deal in all kind of printing & stationary.**

**042-37123334 , 03367123334**

**[fspcompetitions.org](http://fspcompetitions.org), [info@fspcompetitions.org](mailto:info@fspcompetitions.org)**