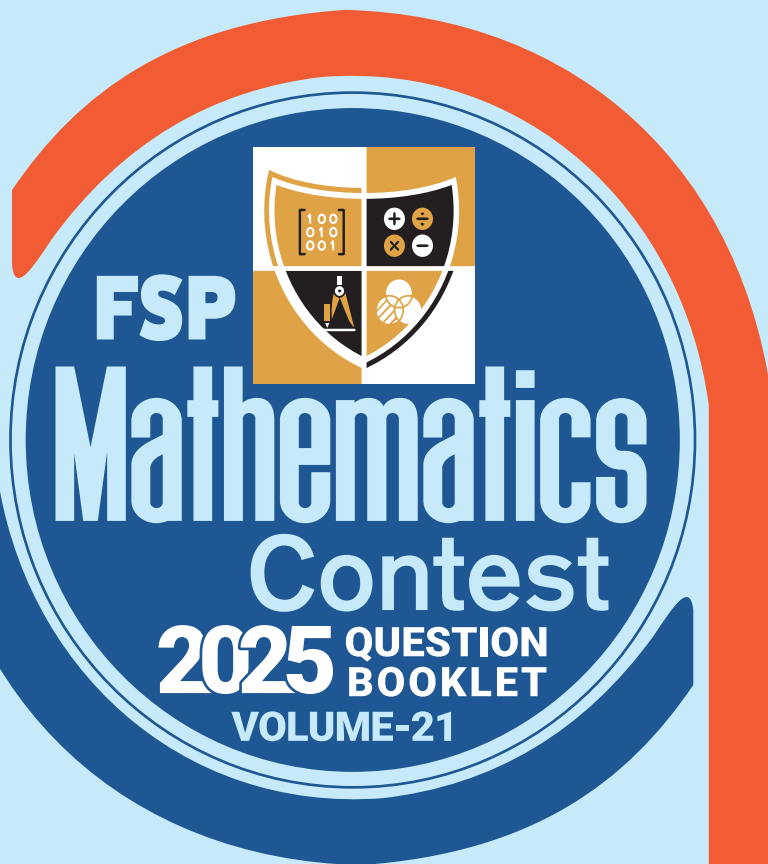




# International FSP Contests



## GRADE 7 & 8

VIBRANT YOUNGSTERS

Time Allowed : 90 Minutes  
Maximum Marks : 90

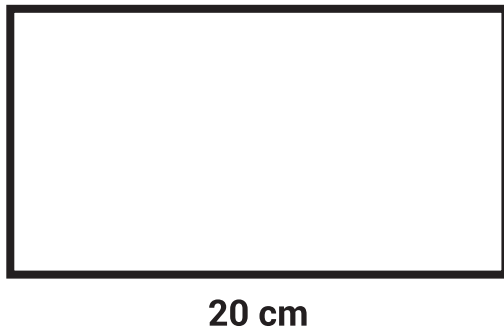
EXHIBIT YOUR SKILLS TO THE WORLD

## INSTRUCTIONS FROM THE EXAMINATION INVIGILATORS

- 1) Invigilators must be carried out promptly.
- 2) Don't start attempting the paper until instructed by the invigilator.
- 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 [www.fspcompetitions.org](http://www.fspcompetitions.org)
- 15) Any academic misconduct or malpractice must be reported to FSP vibrant youngsters at [info@fspcompetitions.org](mailto:info@fspcompetitions.org)

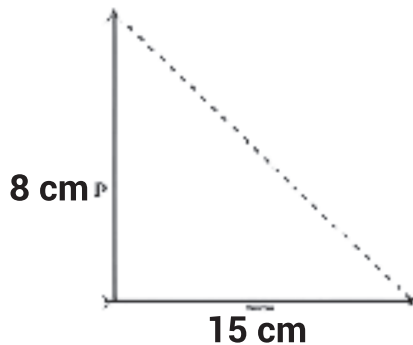
**Q 1.** The perimeter of a rectangle is 64 cm. If its length is 20 cm, what is its width?

- (A)** 10 cm
- (B)** 12 cm
- (C)** 14 cm
- (D)** 16 cm



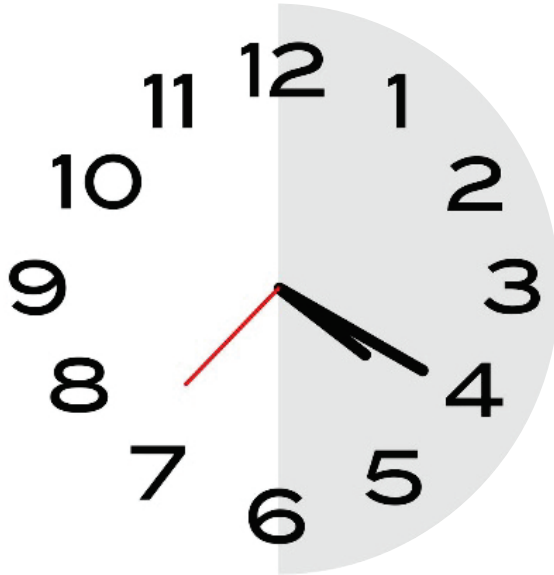
**Q 2.** The base of a triangle is 15 cm and its height is 8 cm. Find its area.

- (A)**  $50 \text{ cm}^2$
- (B)**  $55 \text{ cm}^2$
- (C)**  $60 \text{ cm}^2$
- (D)**  $65 \text{ cm}^2$



**Q 3.** A clock shows 4:20. What is the angle between the hour and minute hands?

- A**  $10^\circ$
- B**  $15^\circ$
- C**  $20^\circ$
- D**  $25^\circ$



**Q 4.** The probability of rolling a number greater than 4 on a fair die is:

- A**  $1/2$
- B**  $1/3$
- C**  $1/6$
- D**  $2/3$

**Q 5.** If 35% of a number is 140, what is the number?

- A** 380
- B** 390
- C** 400
- D** 410

**Q 6.** A shopkeeper increased the price of a shirt from Rs. 800 to Rs. 960.

What is the increase in percentage?

- A** 18%
- B** 20%
- C** 22%
- D** 25%

**Q 7.** A cube has a volume of  $1331 \text{ cm}^3$ .

What is its edge length?

- A** 9 cm
- B** 10 cm
- C** 11 cm
- D** 12 cm

**Q 8.** A man walks 6 km north, then 8 km east. How far is he from his starting point?

- A** 10 km
- B** 12 km
- C** 14 km
- D** 15 km

**Q 9.** Simplify:  $(\frac{7}{8} \div \frac{14}{16}) \times (\frac{4}{7})$   $(\frac{7}{8} \div \frac{14}{16}) \times (\frac{4}{7})$   $(\frac{7}{8} \div \frac{14}{16}) \times (\frac{4}{7})$ .

- A**  $\frac{1}{2}$
- B**  $\frac{4}{7}$
- C**  $\frac{8}{9}$
- D** 1

**Q 10.** The average of 15, 25, 35, and 45 is:

- A** 25
- B** 30
- C** 32.5
- D** 35

**Q 11.** If  $9x - 14 = 49$ , what is  $x$ ?

- A** 6
- B** 7
- C** 8
- D** 9

**Q 12.** A tank holds 80 liters of water. If 30 liters are used, what fraction remains full?

- A**  $\frac{1}{2}$
- B**  $\frac{5}{8}$
- C**  $\frac{3}{8}$
- D**  $\frac{2}{5}$

**Q 13.** A car travels at 90 km/h. How long will it take to cover 270 km?

- A** 2.5 hours
- B** 3 hours
- C** 3.5 hours
- D** 4 hours

**Q 14.** The next prime number after 89 is:

- A** 91
- B** 97
- C** 101
- D** 103

**Q 15.** The simple interest on Rs. 2500 at 10% per year for 4 years is:

- A** Rs. 900
- B** Rs. 950
- C** Rs. 1000
- D** Rs. 1050

**Q 16.** If  $a = 7$ ,  $b = 4$ , evaluate:  $a^2 - b^2 + a + b$

- A** 35
- B** 37
- C** 40
- D** 44



**Q 17.** What is the probability of drawing a black card from a standard deck of 52 cards?

- A**  $1/4$
- B**  $1/2$
- C**  $2/3$
- D**  $3/4$

**Q 18.** The square root of 1156 is:

- A** 32
- B** 33
- C** 34
- D** 35

**Q 19.** The mean of first 20 natural numbers is:

- A** 9.5
- B** 10.5
- C** 11
- D** 11.5

**Q 20.** Solve:  $\frac{3}{8}$  of 640 = ?

- A** 220
- B** 230
- C** 240
- D** 250

**Q 21.** A train travels at 72 km/h. How far will it go in 2 hours 30 minutes?

- A** 160 km
- B** 170 km
- C** 175 km
- D** 180 km

**Q 22.** Which of the following is an irrational number?

- A**  $\sqrt{7}$
- B**  $\frac{3}{4}$
- C** 2.5
- D** -5

**Q 23.** If the ratio of girls to boys is 3:5 and there are 40 students, how many are girls?

- A** 15
- B** 20
- C** 24
- D** 25

**Q 24.** Expand:  $(x+6)(x-6)(x+6)(x-6)(x+6)(x-6)$ .

- A**  $x^2 - 36$
- B**  $x^2 + 36$
- C**  $x^2 + 12x - 36$
- D**  $x^2 - 12x + 36$

**Q 25.** Convert 0.625 into a fraction.

- A**  $3/5$
- B**  $5/8$
- C**  $7/10$
- D**  $2/3$

**Q 26.** Which of these has the greatest value?

- A** 0.63
- B**  $\frac{5}{8}$
- C** 62%
- D** 0.6

**Q 27.** What is the LCM of 24 and 36?

- A** 72
- B** 84
- C** 90
- D** 108

**Q 28.** A sum of Rs. 7200 is divided between A and B in the ratio 5:4. How much does B get?

- A** Rs. 2800
- B** Rs. 3000
- C** Rs. 3200
- D** Rs. 3400

**Q 29.** If today is Friday, what day will it be 65 days later?

- A** Sunday
- B** Monday
- C** Tuesday
- D** Wednesday

**Q 30.** Solve:  $(96 \div 8) + (84 \div 12)$

- A** 17
- B** 18
- C** 19
- D** 20

# NOTES

# NOTES

# ANSWER SHEET

## GRADE 7 & 8

Q.NO ANSWER

- |    |     |     |     |     |
|----|-----|-----|-----|-----|
| 1  | (A) | ●   | (C) | (D) |
| 2  | (A) | (B) | ●   | (D) |
| 3  | ●   | (B) | (C) | (D) |
| 4  | (A) | ●   | (C) | (D) |
| 5  | (A) | (B) | ●   | (D) |
| 6  | (A) | ●   | (C) | (D) |
| 7  | (A) | (B) | ●   | (D) |
| 8  | ●   | (B) | (C) | (D) |
| 9  | ●   | (B) | (C) | (D) |
| 10 | (A) | ●   | (C) | (D) |
| 11 | (A) | ●   | (C) | (D) |
| 12 | (A) | ●   | (C) | (D) |
| 13 | (A) | ●   | (C) | (D) |
| 14 | (A) | ●   | (C) | (D) |
| 15 | (A) | (B) | ●   | (D) |

Q.NO ANSWER

- |    |     |     |     |     |
|----|-----|-----|-----|-----|
| 16 | (A) | (B) | (C) | ●   |
| 17 | (A) | ●   | (C) | (D) |
| 18 | (A) | (B) | ●   | (D) |
| 19 | (A) | ●   | (C) | (D) |
| 20 | (A) | (B) | ●   | (D) |
| 21 | (A) | (B) | (C) | ●   |
| 22 | ●   | (B) | (C) | (D) |
| 23 | ●   | (B) | (C) | (D) |
| 24 | ●   | (B) | (C) | (D) |
| 25 | (A) | ●   | (C) | (D) |
| 26 | ●   | (B) | (C) | (D) |
| 27 | ●   | (B) | (C) | (D) |
| 28 | (A) | (B) | ●   | (D) |
| 29 | (A) | (B) | (C) | ●   |
| 30 | (A) | ●   | (C) | (D) |





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 [www.fspcompetitions.org](http://www.fspcompetitions.org)

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