



**FAMOUS STUDENTS PLATFORM**

**2023**

**FSP MATHEMATICS CONTEST**

**QUESTION BOOKLET**

**GRADE 5 & 6**

**TIME ALLOWED : 90 MINS**

**MAXIMUM MARKS : 90**



**FSP**

**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 5 & 6)
  - C) vibrant youngsters (Grade 7 & 8)
  - D) vibrant youngsters (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.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)

**QUESTION NO : 01**

The numbers in this pattern follow a rule.

5			
4	6		
5	3	7	
4	6	?	8

What is the missing number?

- (A) 2
- (B) 3
- (C) 6
- (D) 8

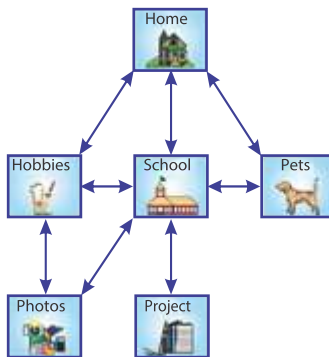
**QUESTION NO : 02**

How many days are there in six years?

- (A) about 300
- (B) about 600
- (C) about 1000
- (D) about 2000

**QUESTION NO : 03**

Nosheen made a website about herself and posted it on the Internet. This diagram shows how the pages of the website are linked.



To view Nosheen's website you must start at the Home page.

Which page of the website can only be viewed by first viewing the School page?

- (A) Hobbies
- (B) Pets
- (C) Photos
- (D) Project

**QUESTION NO : 04**

There are 320 pages in the novel Ali is reading.

Ali has finished reading 25% of the pages in the novel.

How many pages has Ali read?

- (A) 25
- (B) 40
- (C) 80
- (D) 295



**QUESTION NO : 05**

Shazia cut the letter P out of cardboard and pinned it to her noticeboard as shown.



The letter turned  $180^\circ$  around the pin.

Which picture shows its new position?



(A)



(B)



(C)



(D)

- (A) A
- (B) B
- (C) C
- (D) D

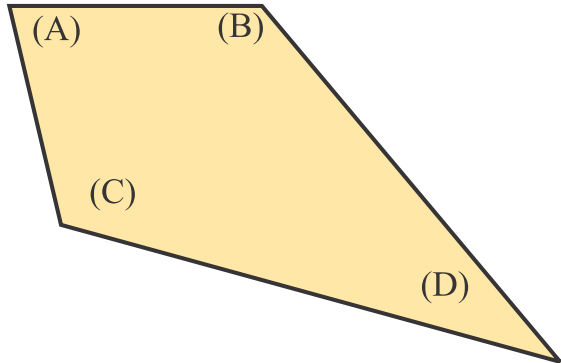
**QUESTION NO : 06**

Which of these numbers is closest to 350?

- (A) 329
- (B) 337
- (C) 362
- (D) 370

**QUESTION NO : 07**

Which is the smallest angle in this shape?



- (A) A
- (B) B
- (C) C
- (D) D

**QUESTION NO : 08**

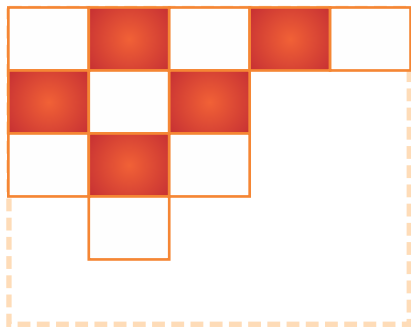
2, 9, ?, 23, 30, ?, 44, 51, 58

Which two numbers are missing from the number pattern?

- (A) 16 and 36
- (B) 16 and 37
- (C) 17 and 36
- (D) 17 and 37

**QUESTION NO : 09**

Myra started to make a square using a pattern of dark and white tiles.



How many MORE dark tiles does she need to complete the square?

- (A) 13
- (B) 12
- (C) 7
- (D) 6

**QUESTION NO : 10**

$$\text{flower} + \text{smiley} + \text{smiley} = 11$$

$$\text{flower} + \text{flower} + \text{star} + \text{smiley} = 10$$

$$\text{flower} + \text{star} + \text{smiley} = 9$$

$$\text{smiley} = \boxed{?}$$

- (A) 1
- (B) 3
- (C) 4
- (D) 5

**QUESTION NO : 11**

A family arrived at the station at 6:08 am. The next train was at 7:04 am.

How long did the family have to wait?

- (A) 56 minutes
- (B) 96 minutes
- (C) 1 hour 4 minutes
- (D) 1 hour 11 minutes

**QUESTION NO : 12**

Imran is posting three of these four toys in a parcel.



doll = 85 g



bear = 99 g



car = 46 g



ball = 65 g

The parcel has to be less than 200 grams.

Which three toys together weigh closest to 200 grams?

- (A) doll, bear, ball
- (B) doll, car, ball
- (C) doll, bear, car
- (D) bear, car, ball

**QUESTION NO : 13**

$8012 \div 4 = ?$

- (A) 23
- (B) 203
- (C) 2003
- (D) 2030

**QUESTION NO : 14**

Mahnoor was studying the ancient number system of the tribal people. She made this table.

1 ●	2 ●●	3 ●●●	4 ●●●●	5 _____
6 ● _____	7 ●● _____	8 ●●● _____	9 ●●●● _____	10 _____ _____

What would be the tribal symbol for 16?



(A)



(B)



(C)



(D)

**QUESTION NO : 15**

Ruby had a small bucket. It could hold 1.3 litres of water.

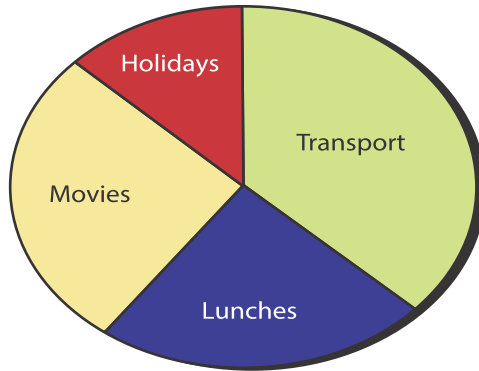
How many buckets that size would hold closest to 10 litres?

- (A) 7
- (B) 8
- (C) 10
- (D) 13



**QUESTION NO : 16**

Shagufta drew a pie chart of how she spends her pocket money.

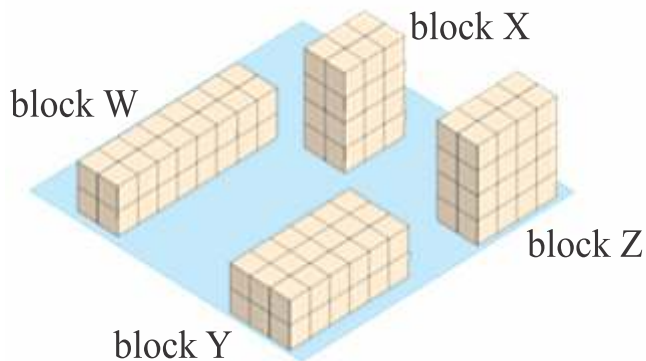


Which category represents about 40% of Shagufta's pocket money?

- (A) Holidays
- (B) Lunches
- (C) Movies
- (D) Transport

**QUESTION NO : 17**

The picture shows four blocks made out of cubes. Each block is a rectangular prism.

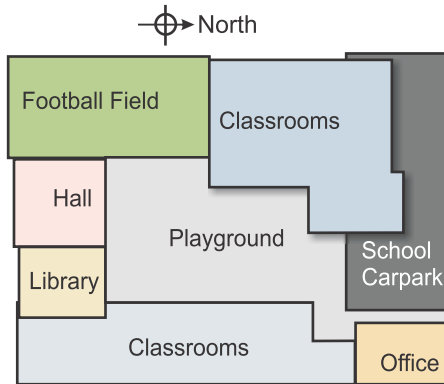


Which two blocks have the same volume?

- (A) X and Z
- (B) W and Y
- (C) X and Y
- (D) W and Z

**QUESTION NO : 18**

Here is a map of a school.



Rashid walks from the office to the football field.

In what direction does Rashid walk?

- (A) north-west
- (B) south-west
- (C) north-east
- (D) south-east

**QUESTION NO : 19**



When this car moves forward 1 metre, each of its wheels completes half a turn.

About how many full turns would each wheel complete if the car travelled 10 kilometres?

- (A) 20 000
- (B) 5 000
- (C) 2 000
- (D) 500

**QUESTION NO : 20**

The table shows the “digit difference” of some two-digit numbers.

Number	Working	Digit Difference
17	$7 - 1 = 6$	6
51	$5 - 1 = 4$	4
94	$9 - 4 = 5$	5
28	$8 - 2 = 6$	6
70	$7 - 0 = 7$	7

How many two-digit numbers between 10 and 100 have a digit difference of 3?

- (A) 9
- (B) 10
- (C) 13
- (D) 18

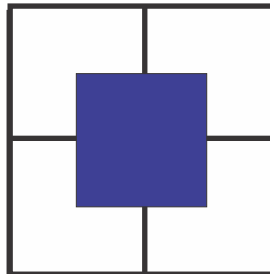
**QUESTION NO : 21**

What is the difference between 33.3 and 3.33?

- (A) 29.97
- (B) 30.97
- (C) 30.00
- (D) 30.03

**QUESTION NO : 22**

A dark square has been placed on four white squares as shown. The sides of these squares are 4 cm long.



What is the area of the white region surrounding the dark square?

- (A)  $16 \text{ cm}^2$
- (B)  $48 \text{ cm}^2$
- (C)  $56 \text{ cm}^2$
- (D)  $64 \text{ cm}^2$

**QUESTION NO : 23**

This toy cat has a mass of 41.5 grams.



What is the mass of this cat in kilograms ?

- (A) 0.00415
- (B) 0.0415
- (C) 0.415
- (D) 4.15

**QUESTION NO : 24**

Maria was training for a race.

She ran 3 km each day except on Sundays when she ran 5 km.

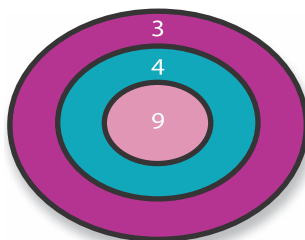
She ran every day for 31 days, and started her first run on a Friday.

How many kilometres did she run in total?

- (A) 90
- (B) 101
- (C) 103
- (D) 155

**QUESTION NO : 25**

Each ball thrown at this target scores points according to where it hits.



Zara hit the target with three balls and totaled her points.

Which of these totals is impossible?

- (A) 9
- (B) 13
- (C) 16
- (D) 21

**QUESTION NO : 26**

Which set of numbers is arranged in order from largest to smallest?

0.054

0.045

0.14

0.4

(A)

0.054

0.4

0.045

0.14

(B)

0.4

0.045

0.14

0.054

(C)

0.4

0.14

0.054

0.045

(D)

- (A) A  
 (B) B  
 (C) C  
 (D) D

**QUESTION NO : 27**

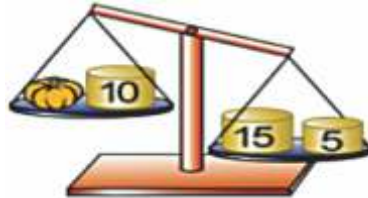
Hameed was exactly 7 years old 15 months ago. Ali was exactly 9 years old 5 months ago.

How much older than Hameed is Ali?

- (A) 2 years 10 months  
 (B) 2 years 0 months  
 (C) 1 year 5 months  
 (D) 1 year 2 months

QUESTION NO : 28

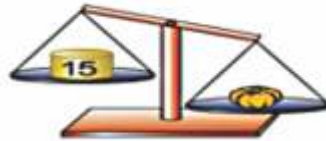
Yazan has a balance scale, a pumpkin, a 5 kg mass, a 10 kg mass and a 15 kg mass.



Using the information in the drawing above, which of these is possible?



(A)



(B)



(C)

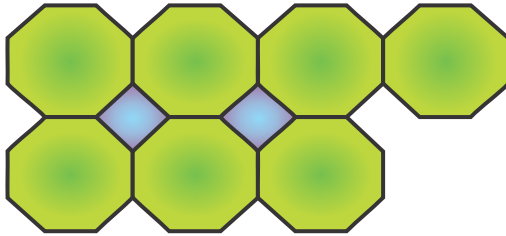


(D)

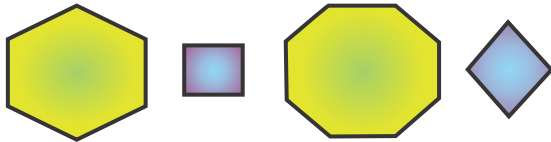
- (A) A
- (B) B
- (C) C
- (D) D

**QUESTION NO : 29**

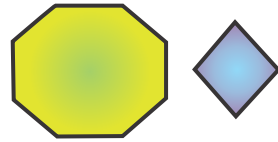
This pattern is made out of tiles.



Which two tiles are needed to complete the pattern?



(A)



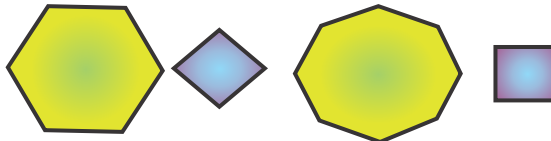
(B)

(A) A

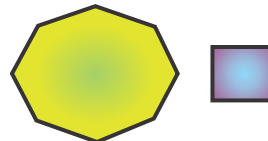
(B) B

(C) C

(D) D



(C)



(D)

**QUESTION NO : 30**

Twenty people were surveyed at a sports centre.

Five people played both football and tennis.

Eight people did not play football.

Eleven people did not play tennis.

How many people did not play either football or tennis?

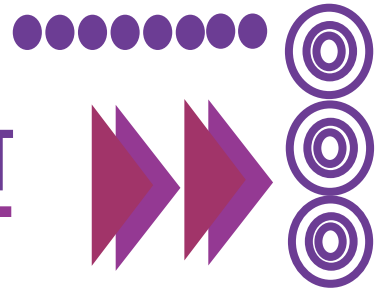
- (A) 1  
 (B) 4  
 (C) 15  
 (D) 19





# ANSWER SHEET

## GRADE 5&6

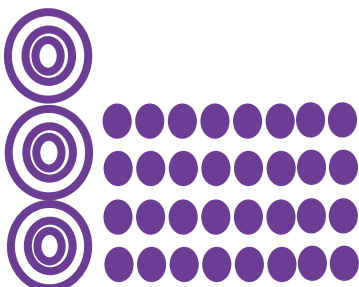


Q.NO ANSWER

- |    |                                  |                                  |                                  |                                  |
|----|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 1  | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            |
| 2  | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> |
| 3  | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> |
| 4  | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            |
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| 8  | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |
| 9  | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            |
| 10 | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> |
| 11 | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            |
| 12 | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |
| 13 | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            |
| 14 | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> |
| 15 | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |

Q.NO ANSWER

- |    |                                  |                                  |                                  |                                  |
|----|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 16 | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> |
| 17 | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> |
| 18 | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |
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| 22 | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |
| 23 | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |
| 24 | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            |
| 25 | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |
| 26 | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> |
| 27 | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> |
| 28 | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            |
| 29 | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> |
| 30 | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            |

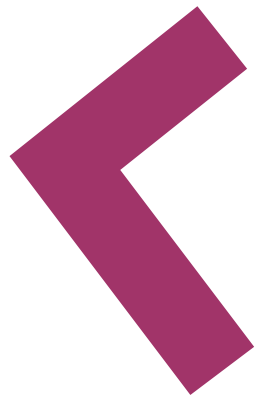


# FSP

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