

SUBJECT: MATHS

LANGUAGE: ENGLISH

**THIRD ETHIOPIA SCHOOL SURVEY
WAVE: 2**

This test booklet contains Mathematics items administered to students in Grades 7 and 8, at Wave 2 of Young Lives' school survey in Ethiopia. This survey took place in 2016-17.

Items were selected following extensive piloting. For more details on item sources and the test development process, see Rossiter et al., (2017). Young Lives School Survey, 2016–17: Ethiopia Country Report.

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1 $2488 \div 8 =$

- A. 11
- B. 311
- C. 2480
- D. 2496

2 A number added to 35 gives 56.

$$\begin{array}{r} 35 \\ + \boxed{?} \\ \hline 56 \end{array}$$

What is the number?

- A. 12
- B. 20
- C. 21
- D. 91

3 7341 is completely divisible by?

- A. 3
- B. 5
- C. 7
- D. 9

4 3 ones + 7 tens =

- A. 73
- B. 40
- C. 37
- D. 10

5 $-4 - (-5) =$

- A. -1
- B. 1
- C. -9
- D. 9

6 Which of these is the cube root of 729?

- A. 9
- B. 13
- C. 19
- D. 27

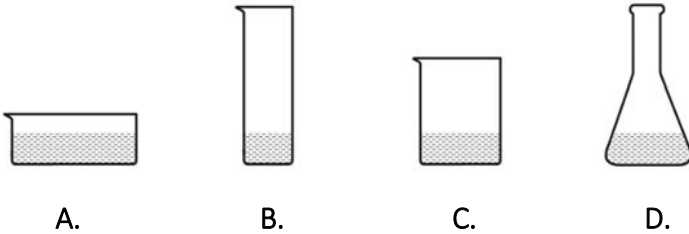
7 Which difference is closest to 300,000?

- A. 100,000 – 50,000
- B. 500,000 – 300,000
- C. 900,000 – 800,000
- D. 800,000 – 100,000

8 $2.34 + 7.65 =$


- A. 99.9
- B. 0.99
- C. 9.99
- D. 999

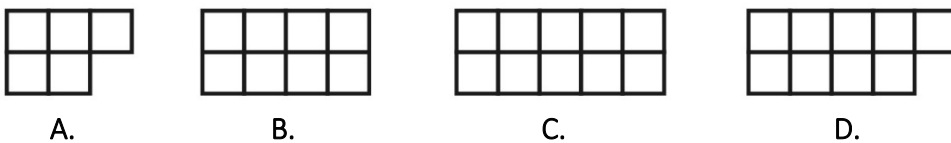
9 4 jars of different shapes are filled with water up to the same height as shown. Which of them has the **least** amount of water in it?



10 Which of the following is a prime number?

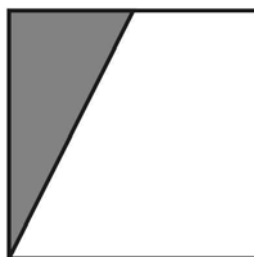
- A. 5
- B. 15
- C. 25
- D. 35

11 If  represents 75%, which of the following represents 125%?



12 What fraction of the shape below is shaded?

- A. 1
- B. $\frac{1}{2}$
- C. more than $\frac{1}{2}$
- D. less than $\frac{1}{2}$



13 What is the place value of 5 in 54620?

- A. ten thousands
- B. hundreds
- C. tens
- D. ones

14 $4.465 - 1.286 =$

- A. 5.751
- B. 3.189
- C. 3.179
- D. 3.279

15 $(-35) + 27 =$

- A. -62
- B. -8
- C. 8
- D. 62

16 If $X = 6$ and $Y = 9$ and $Z = 12$ then $X + Y - Z =$

- A. 0
- B. 3
- C. 6
- D. 15

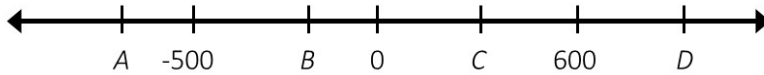
17 Which number is the smallest?

- A. 3,124,300
- B. 3,214,243
- C. 3,124,030
- D. 3,102,430

18 How many hundreds make 70000?

- A. 1
- B. 100
- C. 700
- D. 70000

19 Where can you place 315 on the number line?

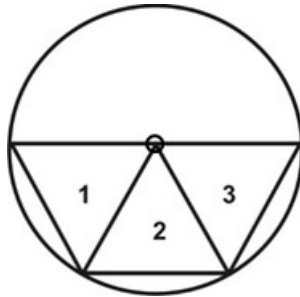


- A. at point A
- B. at point B
- C. at point C
- D. at point D

20 If $A = 2$ what is $3A$ equal to?

- A. 2
- B. 3
- C. 5
- D. 6

21 Three equilateral triangles are inscribed in a circle with center O as shown below. Which of the three triangles are congruent?



- A. triangles 1 and 2 only
- B. triangles 2 and 3 only
- C. triangles 1 and 3 only
- D. all the three triangles

22 A class has 40 boys and 35 girls. What is the ratio of boys to girls?

- A. 7:8
- B. 8:7
- C. 15:7
- D. 15:8

23 $\sqrt{81} =$

- A. 8.1
- B. 9
- C. 18
- D. 40.5

24 Which of the following is another way of writing $5 \times 5 \times 5$?

- A. $3(5)$
- B. $3(5+5+5)$
- C. 3^5
- D. $5^2 \times 5$

25

Mekdes has made a pattern with pieces of chart paper.



What will come next in the pattern?



A.



B.



C.

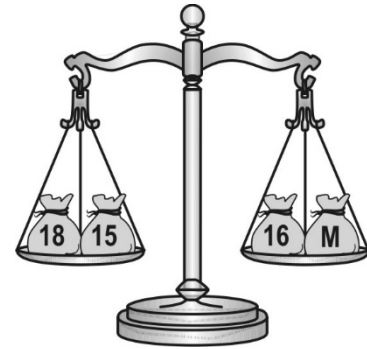


D.

26

Betlehem has balanced some bags of marbles. All the marbles are of the same weight. The number of marbles in each bag is written on it.

How many marbles are there in the bag marked M?



- A. 13
- B. 17
- C. 33
- D. 49

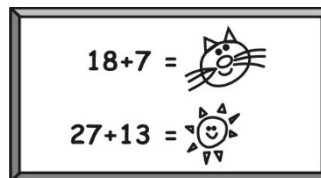
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29

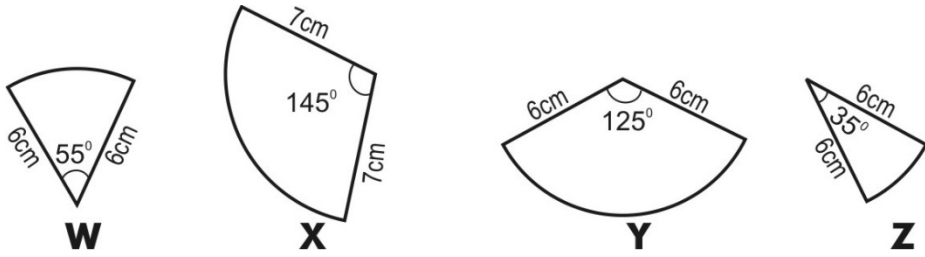
Look at the picture to the right.

What is  —  ?



- A. 6
- B. 15
- C. 20
- D. 40

30 Of the pieces shown here, which two could form a semicircle when placed next to each other with their edges touching?



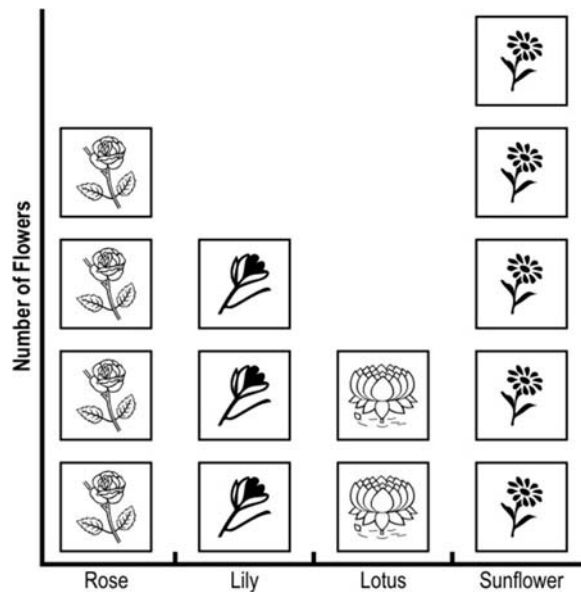
- A. Z and W
- B. W and Y
- C. Y and Z
- D. Z and X

31 Which fraction is the simplified form of $\frac{8}{20}$?

- A. $\frac{1}{20}$
- B. $\frac{4}{5}$
- C. $\frac{2}{5}$
- D. $\frac{4}{8}$

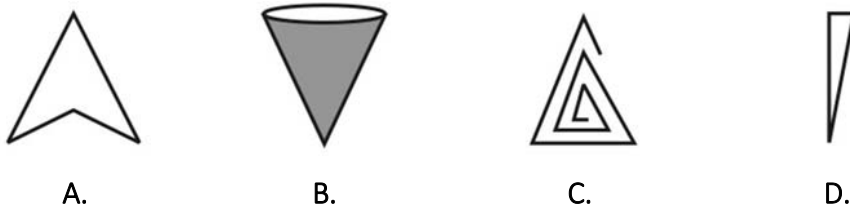
32 Mimmi counted the number of flowers in her garden. She made the following chart. Study the chart and answer the following question.

How many more sunflowers were there than lilies in the garden?



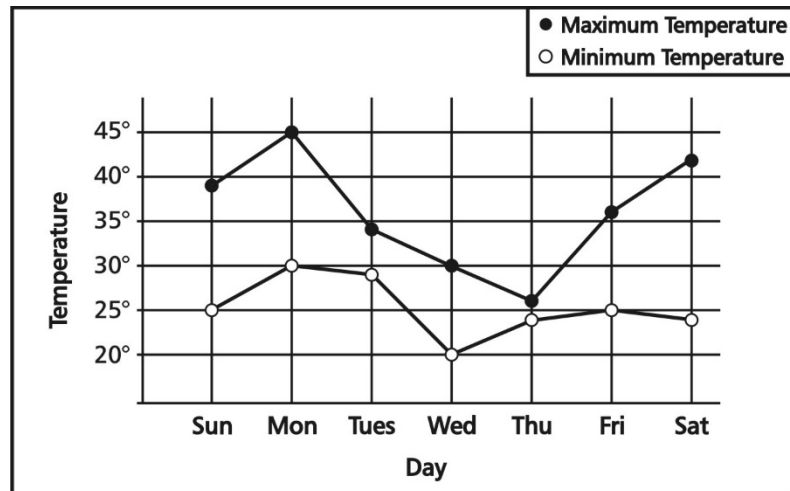
- A. 1
- B. 2
- C. 3
- D. 5

33 Which of these is a triangle?



34

Shown below is the graph representing the highest and the lowest temperature recorded in a day for a week. Study it and answer the question.



On which day of the week was the HIGHEST temperature recorded?

- A. Sunday
- B. Monday
- C. Wednesday
- D. Saturday

35

Tadesse is older than Wendem and Wendem is older than Yacob. Which statement must be true?

- A. Tadesse is older than Yacob.
- B. Tadesse is younger than Yacob.
- C. Tadesse is the same age as Yacob.
- D. We cannot tell who is the oldest from the information.

36

Eshetu's father is 6 times as old as Eshetu. Eshetu's mother is 25 years old. The average age of this family of three is 20 years. How old is Eshetu?

- A. 15 years
- B. 10 years
- C. 7 years
- D. 5 years

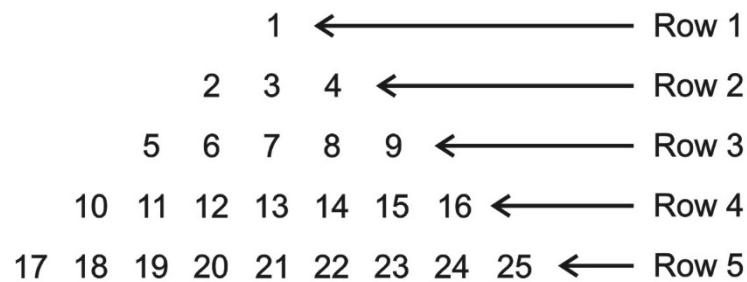
- 37** The table below shows the relationship between the x and y .

x	2	3	4	5
y	4	7	10	13

Which of these equations expresses this relation?

- A. $y = 2x + 2$
- B. $y = x + 2$
- C. $y = 4x - 4$
- D. $y = 3x - 2$

- 38** Observe the number pattern in the number triangle below.



If it is extended, what will be the last number (on the right) in the 9th row?

- A. 25
- B. 36
- C. 61
- D. 81

- 39** $7^2 =$

- A. 7
- B. 14
- C. 49
- D. 72

- 40** What is the area of the square shown below?

- A. 64 cm^2
- B. 32 cm^2
- C. 16 cm^2
- D. 8 cm^2

