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Impact Evaluation of Mindspark Centers

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**Math Baseline Test**  
Grades 6 and 7

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1. Name of the Mindspark center:
2. Center ID:
3. Name of the student:
4. Student ID:

**MBLG671:** YL. Content: Algebra; Topic: Whole numbers; Domain: Knowing facts and procedures; Key: B.

1. Write the correct answer in the space:

$$48 \times 5 = \square$$

- A. 200
- B. 240
- C. 420
- D. 500

**MBLG672:** YL. Content: Algebra; Topic: Whole numbers; Domain: Knowing facts and procedures; Key: C.

2. Write the correct answer in the space:

$$52 - 7 = \square$$

- A. 59
- B. 25
- C. 45
- D. 364

**MBLG673:** YL. Content: Algebra; Topic: Whole numbers; Domain: Knowing facts and procedures; Key: A.

3. Write the correct answer in the space:

$$243 + 176 = \square$$

- A. 419
- B. 67
- C. 70
- D. 914

**MBLG674:** YL. Content: Algebra; Topic: Whole numbers; Domain: Knowing facts and procedures; Key: A.

4. Write the correct answer in the space:

$$27 \div 3 = \square$$

- A. 9
- B. 3
- C. 24
- D. 30

**MBLG675:** YL. Content: Algebra; Topic: Whole numbers; Domain: Knowing facts and procedures; Key: B.

5. Write the correct answer in the space:

$$49 - 28 = \boxed{\phantom{00}}$$

- A. 77
- B. 21
- C. 12
- D. 39

**MBLG676:** SLS. Content: Number; Topic: Whole numbers; Domain: Knowing facts and procedures; Key: B.

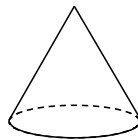
6. Write the answer.

$$20 \div 5 = \boxed{\phantom{00}}$$

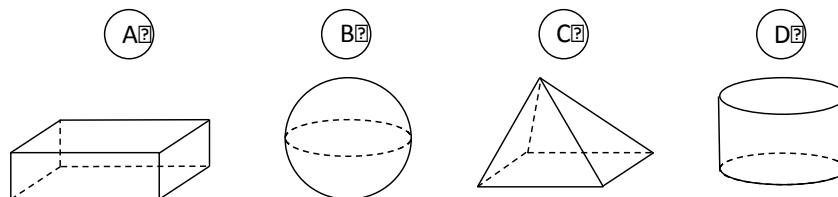
- E. 5
- F. 4
- G. 3
- H. 6

**MBLG677:** QES. Content: Geometry; Topic: Two- and three-dimensional shapes; Domain: Knowing facts and procedures; Key: D.

7. Here is a cone. Part of its surface is flat and part of its surface is curved.

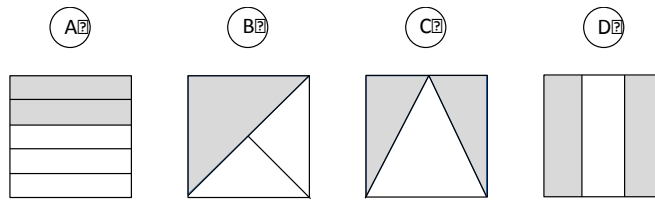


Which of these solids also has a flat surface and a curved surface?



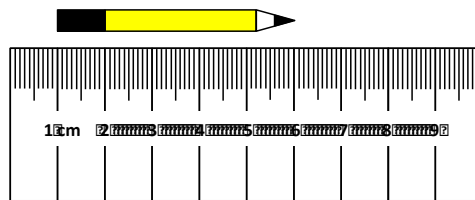
**MBLG678:** TIMSS 2003. Content: Number; Topic: Fractions and decimals; Domain: Using concepts; Key: D.

8. Which shows  $\frac{2}{3}$  of the square shaded?



**MBLG679:** QES. Content: Measurement; Topic: Tools, techniques, and formulas; Domain: Reasoning; Key: B.

9. The length of this pencil is about \_\_\_\_\_.



- A. 4 cm
- B. 5 cm
- C. 6 cm
- D. 7 cm

**MBLG6710:** SLS. Content: Number; Topic: Whole numbers; Domain: Solving routine problems; Key: C.

10. Shaheen has 2 pencil boxes. Each box has 5 pencils. How will you find the total number of pencils in the two pencil boxes?

- A.  $2 + 5$
- B.  $5 - 2$
- C.  $2 \times 5$
- D.  $2 + 2$

**MBLG6711:** TIMSS 2003. Content: Number; Topic: Whole numbers; Domain: Solving routine problems; Key: A.

11. It takes Diksha 4 minutes to wash a window. She wants to know how many minutes it will take her to wash 8 windows at this rate. She should:

- A. multiply  $4 \times 8$
- B. divide 8 by 4
- C. subtract 4 from 8
- D. add 8 and 4

**MBLG6712:** SLS. Content: Number; Topic: Fractions and decimals; Domain: Knowing facts and procedures; Key: D.

12. Write the answer.

$$2\frac{1}{2} + 1\frac{1}{2} = \boxed{\phantom{00}}$$

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

**MBLG6713:** TIMSS 2003. Content: Data; Topic: Data interpretation; Domain: Solving routine problems; Key: B.

13. This chart shows temperature readings made at different times on four days.

Temperatures					
	6 a.m.	9 a.m.	Noon	3 p.m.	8 p.m.
Monday	15°	17°	20°	21°	19°
Tuesday	15°	15°	15°	15°	9°
Wednesday	8°	10°	14°	14°	15°
Thursday	8°	11°	14°	14°	20°

When was the highest temperature recorded?

- A. noon on Monday
- B. 3 p.m. on Monday
- C. noon on Tuesday
- D. 3 p.m. on Wednesday

**MBLG6714:** QES. Content: Number; Topic: Fractions and decimals; Domain: Knowing facts and procedures; Key: C.

14. Arrange these fractions in ascending order (from smallest to largest).

$$\frac{3}{8}, \frac{5}{16}, \frac{5}{8}$$

- A.  $\frac{3}{8}, \frac{5}{8}, \frac{5}{16}$
- B.  $\frac{5}{16}, \frac{5}{8}, \frac{3}{8}$
- C.  $\frac{5}{16}, \frac{3}{8}, \frac{5}{8}$
- D.  $\frac{3}{8}, \frac{5}{16}, \frac{5}{8}$

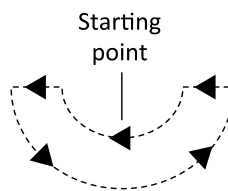
**MBLG6715:** QES. Content: Number; Topic: Whole numbers; Domain: Knowing facts and procedures; Key: A.

15.  $(5698 + 3397) \times 5508 \times (0 \div 2754)$  equals:

- A. 0
- B. 9095
- C. a number greater than a lakh
- D. none of the above as we cannot divide 0 by a number

**MBLG6716:** QES. Content: Geometry; Topic: Two- and three-dimensional shapes; Domain: Knowing facts and procedures; Key: B.

16. An ant starts at a point on this shape, walks along the boundary and comes back to the starting point. It does not turn back at any time.



Which of the following is the same as the distance walked by the ant?

- A. the length of the ant
- B. the perimeter of the shape
- C. the area enclosed by the shape
- D. the length of the horizontal lines in the shape

**MBLG6717:** QES. Content: Data; Topic: Data interpretation; Domain: Solving routine problems; Key: C.

17. A table showing the details and features of various models of TV that a company manufactures is shown below.

Model	Features				Price (in Rs)
	Flat screen	Auto programming	Full function remote	Stereo sound system	
A	X	X	X	X	15,700
B	X	X	X		14,299
C		X	X	X	14,689
D		X			12,899

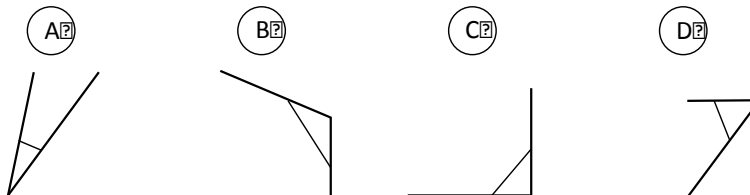
Mrs. Shastri wants to buy a **TV and a voltage stabilizer** within a budget of Rs. 15,000. The features which he wants his TV to have are a “full function remote” and “stereo sound system”.

A stabilizer costs Rs. 300. Which model should she buy?

- A. model A
- B. model B
- C. model C
- D. model D

**MBLG6718:** QES. Content: Geometry; Topic: Lines and angles; Domain: Knowing facts and procedures; Key: B.

18. Which angle has the greatest degree measure?



**MBLG6719:** QES. Content: Data; Topic: Data interpretation; Domain: Using concepts; Key: D.

19. Ruchika and Sharanya are answering a paper containing 100 very simple questions. For each 5 correct answers, one gets a chocolate. As per the rule and the results, Ruchika got 15 chocolates and Sharanya got 10 chocolates. Which of the following is true?

- A. Ruchika got 5 more questions right than Sharanya
- B. Ruchika got 10 more questions right than Sharanya
- C. Ruchika got 25 more questions right than Sharanya
- D. Ruchika got 1 more question right than Sharanya

**MBLG6720:** SLS. Content: Algebra; Topic: Fractions and decimals; Domain: Solving routine problems; Key: D.

20. What is the total bill amount?

<b>Kamal Stationery</b>			
24, Ghandi Road, Ahmedabad			
Goods	Price	Qty.	Amount
Rubber	2.00	5	10.00
Ruler	1.50	1	1.50
Pencil	3.00	1	3.00
Chalk box	15.00	1	15.00
Total Rs.			?
For, Kamal Stationery			

- A. Rs. 10.00.
- B. Rs. 21.50.
- C. Rs. 29.00.
- D. Rs. 29.50.

**MBLG6721:** TIMSS 2007. Content: Number; Topic: Equations and formulas; Domain: Reasoning; Key: C.

21. The temperature at 7 a.m. one morning was  $12^{\circ}\text{C}$ . It increased by  $2^{\circ}\text{C}$  every hour until it reached  $20^{\circ}\text{C}$  at 11 a.m. What was the temperature at 9 a.m.?

- A.  $14^{\circ}\text{C}$
- B.  $15^{\circ}\text{C}$
- C.  $16^{\circ}\text{C}$
- D.  $17^{\circ}\text{C}$



**MBLG6722:** TIMSS 2007. Content: Number; Topic: Whole numbers; Domain: Knowing facts and procedures; Key: B.

22.  $64 \div \blacksquare = \blacksquare$

In this number sentence,  $\blacksquare$  stands for the same number. What number does  $\blacksquare$  stand for?

- A. 4
- B. 8
- C. 16
- D. 32

**MBLG6723:** QES. Content: Algebra; Topic: Patterns; Domain: Reasoning; Key: C.

23. See the pattern of numbers in the number chart below:

	Column 1	Column 2	Column 3	Column 4	Column 5
Row 1	4	8	12	16	20
Row 2	24	28	32	36	40
Row 3	44	48	52	56	60
Row 4	64	68	72	76	80
Row 5					

Which of these is the correct way of finding the number that will appear just below 64 in column 1?

- A. adding 1 to 64
- B. adding 4 to 64
- C. adding 20 to 64
- D. adding 44 to 64

**MBLG6724:** SLS. Content: Algebra; Topic: Patterns; Domain: Reasoning; Key: D.

24. What do you have to do to each number in Column A to get the number next to it in Column B?

Column A	Column B
10	2
15	3
25	5
50	10

- A. add 8 to the number in Column A
- B. subtract 8 from the number in Column A
- C. multiply the number in Column A by 5
- D. divide the number in Column A by 5

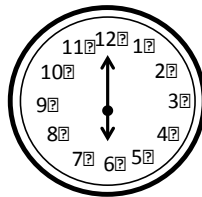
**MBLG6725:** SLS. Content: Number; Topic: Whole numbers; Domain: Reasoning; Key: B.

25.  $25 \times 18$  is more than  $24 \times 18$ . How much more?

- A. 1
- B. 18
- C. 24
- D. 25

**MBLG6726:** SLS. Content: Data; Topic: Data interpretation; Domain: Solving routine problems; Key: B.

26. What time is this clock showing?



- A. half past twelve
- B. six o'clock
- C. half past six
- D. twelve o'clock

**MBLG6727:** YL. Content: Number; Topic: Fractions and Decimals; Domain: Knowing facts and procedures; Key: A.

27.  $18.23 - 0.2 =$

- A. 18.03
- B. 18.21
- C. 16.23
- D. 18.30

**MBLG6728:** YL. Content: Number; Topic: Whole numbers; Domain: Knowing facts and procedures; Key: A.

28.  $921 \times 123 =$

- A. 113283
- B. 5526
- C. 102283
- D. 942183

**MBLG6729:** YL. Content: Number; Topic: Fractions and decimals; Domain: Knowing facts and procedures; Key: A.

29.  $\frac{9}{8} \times \frac{2}{3} =$

- A.  $\frac{3}{4}$
- B.  $\frac{18}{21}$
- C.  $\frac{19}{24}$
- D.  $\frac{27}{16}$

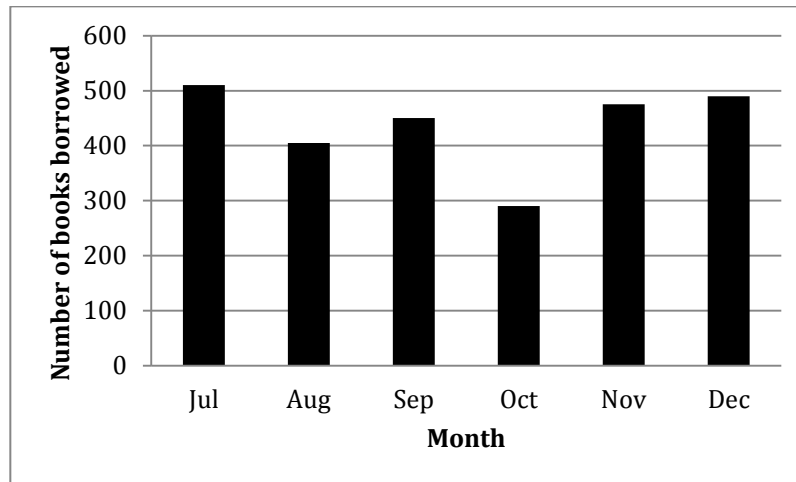
**MBLG6730:** YL. Content: Number; Topic: Whole numbers; Domain: Knowing facts and procedures; Key: A.

30.  $0.624 \div 1.04 =$

- A. 0.06
- B. 0.60
- C. 60
- D. 6

**MBLG6731:** QES. Content: Data; Topic: Data interpretation; Domain: Solving routine problems; Key: D.

31. The graph below shows the number of books borrowed from a children's library from July 1 to December 31. Which of the following CAN be found out from this graph?



- A. the number of books borrowed between 15<sup>th</sup> and 30<sup>th</sup> November
- B. why such few books were borrowed in October
- C. the number of children who visited the library in August
- D. the month(s) in which more than 500 books were borrowed

**MBLG6732:** TIMSS 2011. Content: Number; Topic: Whole number; Domain: Reasoning; Key: D.

32. The scale on a map indicates that 1 centimeter on the map represents 4 kilometers on the land. The distance between two towns on the map is 8 centimeters. How many kilometers apart are the two towns?

- A. 2
- B. 8
- C. 16
- D. 32

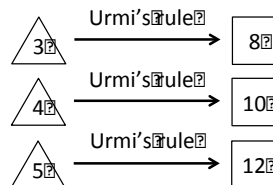
**MBLG6733:** TIMSS 2011. Content: Algebra; Topic: Patterns; Domain: Reasoning; Key: B.

33. If the pattern 3, 6, 9, 12 was continued, which of these numbers would be one of the numbers in the pattern?

- A. 26
- B. 27
- C. 28
- D. 29

**MBLG6734:** TIMSS 2011. Content: Number; Topic: Patterns; Domain: Using concepts; Key: B.

34. Urmi used a rule to get the number in the  from the number in the .



What was the rule?

- A. multiply by 1 then add 5
- B. multiply by 2 then add 2
- C. multiply by 3 then subtract 1
- D. multiply by 4 then subtract 4

**MBLG6735:** TIMSS 2011. Content: Algebra; Topic: Patterns; Domain: Reasoning; Key: B.

35. In which of the following figures is the dotted line a line of symmetry?

