DREAMLINE STEAM OLYMPIAD

1–2
GRADE



Grade 1–2 Mathematics Olympiad Sample Questions

dreamlinesteam.com

1

Mia is arranging numbers in order:

17 19 21 ? 25

What number belongs in the box?

A) 22 | **B) 23** | C) 24 | D) 26

Answer: B) 23

Solution:

The numbers increase by 2 each time: **17, 19, 21, 23, 25**

2

Using the digits **3, 7, and 5** only once, what is the **largest three-digit number** you can make?



A) 573 | B) 735 | **C) 753** | D) 357

Answer: C) 753

Solution:

Put the largest digit first, then the next largest:

7 > 5 > 3

So the largest number is: **753**

3

Ali has **6 red balloons**. He wants to have exactly **10 balloons**.

How many more balloons does he need?



(A) 3 (B) 4 (C) 5 (D) 6

Answer: B) 4
Solution: **10 − 6 = 4**

4

A robot makes this pattern:

2 **6** **12** **20** **30** **?**

What number comes next?



(A) 40 (B) 42 (C) 44 (D) 46

Answer: D) 42
Solution: Differences: **+4, +6, +8, +10**
Next difference is **+12** .
30 + 12 = 42

5

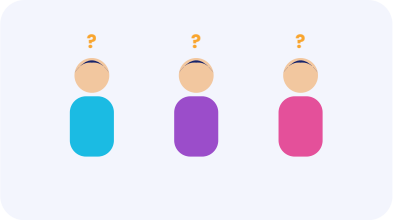
What should replace the question mark?

⭐ 🔵 ⭐ 🔵 ⭐ 🔵 ⭐ ❓

(A) ⭐ (B) 🔵 (C) 🔺 (D) 🟩

Answer: B) 🔵
Solution: The pattern repeats:
⭐, 🔵, ⭐, 🔵, …

6



Three children stand in a line.

- Ben is taller than Ali.
- Ali is taller than Sara.

Who is the **shortest**?

(A) Ben | (B) Ali | (C) Sara | (D) Cannot tell

Answer: C) Sara
Solution: Ben > Ali > Sara
So Sara is the shortest.

7



There are **5 balls** in a bag:

- 2 red
- 2 blue
- 1 green

Without looking, which color is there **only once**?

(A) Red | (B) Blue | (C) Green | (D) All of them

Answer: C) Green

8

If: ⭐ + ⭐ + ⭐ + ⭐ = **32**

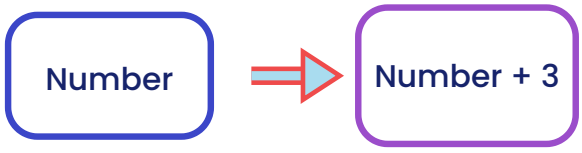
what is the value of ⭐?

(A) 2 | (B) 4 | (C) 5 | (D) 8

Answer: D) 8
Solution: 32 ÷ 4 = 8

9

A machine follows this rule:



If the machine receives **9**, what comes out?

(A) 9 (B) 10 (C) 11 **(D) 12**

Answer: D) 12

10

One apple weighs the same as **2 small oranges**.

If one apple weighs **6 units**, how much do **2 small oranges** weigh?



(A) 2 units (B) 3 units **(C) 6 units** (D) 12 units

Answer: C) 6 units

11 Which Is Heavier?



A box contains:

- 4 kg of cotton
- 3 kg of books

Which statement is correct?

(A) Cotton is heavier by 7 kg

(B) Toys are heavier by 1 kg

(C) They weigh the same

(D) Cotton is heavier by 1 kg

Answer: D) Cotton is heavier by 1 kg

12



I have:

- 4 equal sides
- 4 corners

Which shape am I?

(A) Triangle

(B) Circle

(C) Square

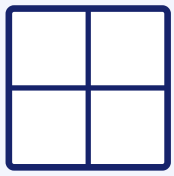
(D) Rectangle

Answer: C) Square

13

A large square is divided into **4 equal smaller squares**.

How many squares are there **altogether**?



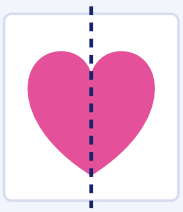
(A) 4 (B) 5 (C) 6 (D) 8

Answer: B) 5
Solution:
There are 4 small squares plus the large outside square:
4 + 1 = 5

14

A paper has a **heart shape** drawn exactly in the middle. The paper is folded along its vertical center line.

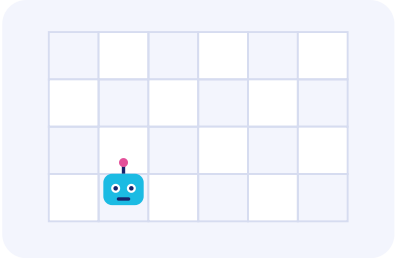
What happens to the two halves of the heart?



(A) They match exactly
(B) One half disappears
(C) They become different shapes
(D) The heart becomes a triangle

Answer: A) They match exactly

15



A robot moves:

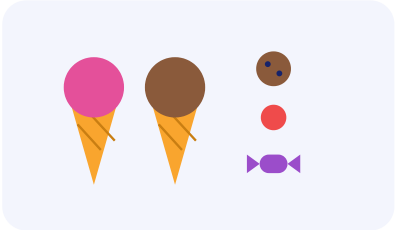
- 3 squares to the right
- 2 squares up
- 1 square to the left

How many squares to the **right of its starting position** is the robot?

(A) 1 (B) 2 (C) 3 (D) 4

Answer: B) 2
Solution:
3 − 1 = 2
The 2 upward moves do not change its left-right position.

16



A shop has **2 flavors**:

🍓 Strawberry
🍫 Chocolate

and **3 toppings**:

🍪 Cookie
🍓 Berry
🍬 Candy

A child chooses **one flavor and one topping**.

How many different choices are possible?

(A) 5 (B) 6 (C) 7 (D) 8

Answer: B) 6
Solution: 2 × 3 = 6

17

A school bus leaves for a science museum at **8:15 a.m.**.
The entire excursion, including travel, activities, and lunch, lasts **4 hours 55 minutes**.

At what time will the excursion end?



(A) 12:50 p.m.
(B) 1:00 p.m.
(C) 1:10 p.m.
(D) 1:20 p.m.

Solution: Start time: **8:15 a.m.**
Add **4 hours** → **12:15 p.m.**
Add **55 minutes** → **1:10 p.m.**
✅ **Answer: C) 1:10 p.m.**

18

Today is **Wednesday**.

What day will it be **13 days later**?



(A) Friday
(B) Monday
(C) Sunday
(D) Tuesday

Answer: D) Tuesday

- 13 days = 7 days + 6 days
- After 7 days, it is **Wednesday** again.
- Move forward 6 more days:

Wednesday → Thursday (1) → Friday (2) → Saturday (3) → Sunday (4) → Monday (5) → **Tuesday (6)**

19

A toy costs **$7**. Sara has **$12**.

How much money will she have left after buying the toy?



(A) $2 (B) $3 (C) $4 **(D) $5**

Answer: D) $5
12 − 7 = 5

20

A ribbon is cut **2 times**.

How many pieces are made?



(A) 2 (B) 3 (C) 4 (D) 5

Answer: B) 3
Solution:
Each cut creates one additional piece:
2 + 1 = 3

21

Three squares are next to each other:



Each square must be either **red or blue**. Neighboring squares cannot have the same color. How many different color patterns are possible?

A) 1 | **B) 2** | C) 3 | D) 4

Answer: B) 2

The two possibilities are:

🔴🔵🔴 or 🔵🔴🔵

22

Each row must add up to **10**.

3	2	5
4	1	5
6	?	2

What number belongs in the box?

A) 1 | **B) 2** | C) 3 | D) 4

Answer: B) 2

Solution:

6 + ? + 2 = 10

? = 2

23



There are three boxes.

- Box A has **2 more balls than Box B**.
- Box C has **3 more balls than Box A**.
- Box B has **5 balls**.

How many balls are there in Box C?

(A) 7 (B) 8 (C) 10 (D) 12

Answer: C) 10
Solution: Box B: **5**
Box A: **5 + 2 = 7**
Box C: **7 + 3 = 10**

24



I am thinking of a number.

- I am greater than 20.
- I am less than 30.
- I am even.
- My digits add up to 8.

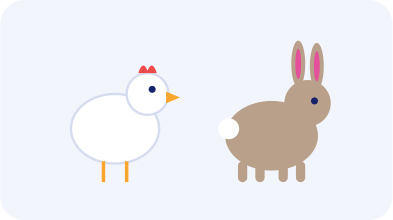
What number am I?

(A) 22 (B) 24 (C) 26 (D) 28

Answer: C) 26
Solution: Even numbers between 20 and 30 are: 22, 24, 26, 28
Check the digit sums:

- 2 + 2 = 4
- 2 + 4 = 6
- 2 + 6 = 8 ✅
- 2 + 8 = 10

25



At a small farm, there are only **chickens and rabbits**.
When the farmer counts them, he finds **24 animals**. When he counts their legs, he gets **68 legs** altogether.

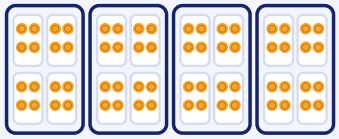
How many rabbits are on the farm?

(A) 8 (B) 10 (C) 12 (D) 14

Answer: B) 10

Solution: If all 24 animals were chickens: **24 × 2 = 48**
There are: **68 − 48 = 20** extra legs.
Each rabbit has **2 more legs** than a chicken: **20 ÷ 2 = 10**
Therefore: 10 rabbits

26



There are 4 boxes.

Each box contains 4 smaller boxes.

Each smaller box contains 4 gold coins.

How many gold coins are there?

(A) 32 (B) 48 (C) 64 (D) 80

Solution:
4 × 4 × 4 = 64
✅ **Answer: C) 64**

27

A number is multiplied by 5 and then 8 is added.

The result is 43. What is the number?

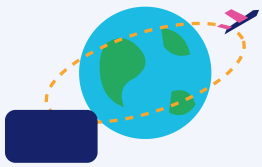
(A) 6 | (B) 7 | (C) 8 | (D) 9

Solution:
5n + 8 = 43
5n = 35
n = 7
✅ **Answer: B) 7**

28

Today is **Thursday**. Your friend is enjoying a long trip around the world. He says he will return exactly **101 days from today**.

On which day of the week will he come back?



(A) Friday | (B) Saturday | (C) Monday | (D) Sunday

Solution: 101 ÷ 7 = 14 remainder 3
Move 3 days after Thursday: Friday → Sunday
✅ **Answer:** D) Sunday

29

A class has 24 students.

Each student reads 18 pages.

How many pages are read altogether?



(A) 412 | (B) 422 | (C) 428 | (D) 432

Solution: 24 × 18 = 24 × (20 - 2) = 480 − 48 = 432
✅ **Answer: D) 432**

30 **Find the missing number.**

3 → 7 → 15 → 31 → ?

A) 47

B) 63

C) 61

D) 75

Solution

3 × 2 + 1 = 7
7 × 2 + 1 = 15
15 × 2 + 1 = 31
31 × 2 + 1 = 63

✅ **Answer: B) 63**