



Unified International
Mathematics Olympiad

UNIFIED INTERNATIONAL MATHEMATICS OLYMPIAD

CLASS - 2
Question Paper Code : 4P114

KEY

1	2	3	4	5	6	7	8	9	10
B	D	D	A	D	Delete	A	B	A	C
11	12	13	14	15	16	17	18	19	20
B	B	D	D	D	C	D	B	D	B
21	22	23	24	25	26	27	28	29	30
C	D	C	C	C	B	C	D	D	A
31	32	33	34	35	36	37	38	39	40
D	C	A	C	D	B	D	D	C	B

EXPLANATIONS

MATHEMATICS

01. (B) Total flowers 9

$$5 \times 2 = 10$$

$$10 - 9 = 1$$

02. (D) 46

Simple check:

- Reverse 14 \rightarrow 41; $41 - 14 = 27$
- Reverse 25 \rightarrow 52; $52 - 25 = 27$
- Reverse 36 \rightarrow 63; $63 - 36 = 27$
- Reverse 46 \rightarrow 64; $64 - 46 = 18$

So 46 does not give a difference of 27.

03. (D) 1, 2, 3, 11, 22, 33, 111, 222, 333, 1111, 2222, 3333, 11111, 22222, 33333,

$$111111, \frac{222222}{17^{\text{th}}}$$

$$2 + 2 + 2 + 2 + 2 + 2 = 12$$

04. (A)

$$\bigcirc \bigcirc \bigcirc \bigcirc = \square \square \square$$

$$\triangle \triangle = \bigcirc \bigcirc \bigcirc$$

$$\triangle \triangle \bigcirc = \square \square \square$$

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$$= \square \square \square \square \square \square \square \square \square$$

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$$= \square \square \square \square \square \square \square \square \square$$

$$\begin{array}{r}
 42 \\
 42 \\
 \hline
 42 \\
 \hline
 126
 \end{array}$$

$$\square = 4, \triangle = 2; 4 + 2 = 6$$

06. Delete

07. (A) 4 pens cost the same as 3 rulers.

Diya buys 16 pens ? $16 \div 4 = 4$ times more.

So, 3 ruler's $\times 4 = 12$ rulers.

08. (B) Ritu had 1 cat + 7 kittens = 8. She gave away 5 kittens. $8 - 5 = 3$ pets left.

09. (A) $W = 100$ (even)

$Z = 39$ (divisible by 3)

$X = 47$ (odd > 30)

$Y = 29$ (only divisible by 1 and itself)

10. (C) He doubles the money every week:

$10 \rightarrow 20 \rightarrow 40 \rightarrow 80 \rightarrow 160$. So, Week 5.

11. (B) 3 bottles of C ($3 \times 4l = 12l$)

12. (B) Between 11 and 12, the minute hand will complete 1 full round.

Between 12 and 1, the minute hand will complete 1 full round.

Between 1 and 2, the minute hand will complete 1 full round.

Between 2 and 3, the minute hand will complete 1 full round.

Therefore, between 11 and 3, the minute hand will complete 4 full rounds.

13. (D) Check each option:

2 siblings $\rightarrow 36 \div 2 = 18$ sweets each

3 siblings $\rightarrow 36 \div 3 = 12$ sweets each

4 siblings $\rightarrow 36 \div 4 = 9$ sweets each

5 siblings $\rightarrow 36 \div 5 \rightarrow$ cannot share equally

14. (D) 6 cabbages $\div 2 = 3$ days of cabbages.

$7 - 3 = 4$ days of carrots. $4 \times 10 = 40$ carrots.

15. (D) $\bigcirc = 1, \square = 4, \triangle = 2$

$\bigcirc =$ half of $2 = 1$

$\square =$ twice of $2 = 4$

16. (C) Both same (Ravi: 600 ml, Priya: 600 ml).

17. (D) $12 + 18 = 30$ sweets. $30 \div 6 = 5$ sweets each.

18. (B) $11 \text{ cm} - 6 \text{ cm} = 5 \text{ cm}$

19. (D) The cat starts at Q.

The total loop is 15 m.

The cat walks 20 m \rightarrow 15 m completes one loop, 5 m left.

From Q: 4 m to R, then 1 m to S.

The cat ends at S

20. (B) $35 \text{ Rs} + 35 \text{ Rs} = 70 \text{ Rs}$

Tarun bought 2 handkerchiefs.

21. (C) $\square = 6, \diamond = 6$

22. (D) $20 < 23 < 25$

23. (C) 1 Tea pot = 6 cups

3 Tea pots = 3(6 cups)

3 Tea pots = 18 cups

24. (C) $25 + 10 = 35$

25. (C)  = 3 : 30 minutes past 3.

26. (B) $22 - 7 = 20 - 5$

$15 = 15$

27. (C) $28 - 25 = 3$

28. (D) Look at the numbers: $16 \rightarrow 20 \rightarrow 24 \rightarrow 28$

Each number is getting bigger by 4.

That means we are counting by fours.

29. (D) We want each child to get the same number of sweets.

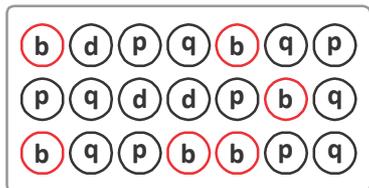
When we share equally, we divide.

$56 \text{ sweets} \div 8 \text{ children} = 7 \text{ sweets for each child}$

30. (A) $6 \div 2 = 3$ (There are 3 distinct pairs or groups of 2 stars.)

REASONING

31. (D) Except option (D), we use all in winter season

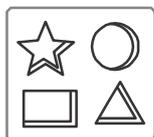


32. (C)



33. (A)

34. (C) A cube is a solid 3D shape; a square is a flat 2D shape.



35. (D)

36. (B) Letter 'a' is not hidden in the given image.



37. (D)



38. (D) Rule is the repeated letter i

39. (C) CE, FH, IK, LN, OQ, RT

40. (B) In the group all are kitchen items



THE END
