1. WHAT IS THE VALUE OF 48 ÷ 4 + 7?
A) 15
B) 17
C) 19
D) 21
E) 23

2. A STORE SELLS 3 PENS FOR $12. HOW MUCH DO 5 PENS COST?
A) $15
B) $18
C) $20
D) $22
E) $24

3. WHAT IS THE NEXT NUMBER IN THE SEQUENCE: 1, 4, 9, 16, _ _?
A) 20
B) 23
C) 25
D) 28
E) 30

4. A RECTANGLE HAS AN AREA OF 24 CM² AND A WIDTH OF 4 CM. WHAT IS ITS PERIMETER?
A) 16 CM
B) 20 CM
C) 24 CM
D) 28 CM
E) 32 CM

5. IF IT'S 2:30 PM NOW, WHAT TIME WILL IT BE IN 3 HOURS AND 45 MINUTES?
A) 5:15 PM
B) 5:45 PM
C) 6:15 PM
D) 6:45 PM
E) 7:15 PM

6. HOW MANY CUBES WITH SIDE LENGTH 1 CM ARE NEEDED TO FILL A BOX THAT IS 3 CM LONG, 2 CM WIDE, AND 2 CM TALL?

A) 8

B) 10

C) 12

D) 14

E) 24

7. LISA HAS $15. SHE BUYS A BOOK FOR $9 AND A SNACK FOR $4. HOW MUCH MONEY DOES SHE HAVE LEFT?

A) $1

B) $2

C) $3

D) $4

E) $5

8. WHAT IS THE VALUE OF $5 \times (3 + 4) - 6$?

A) 25

B) 29

C) 31

D) 35

E) 39

9. A NUMBER IS DOUBLED, THEN 5 IS SUBTRACTED, AND THE RESULT IS 17. WHAT IS THE NUMBER?

A) 9

B) 10

C) 11

D) 12

E) 13

10. HOW MANY DIGITS ARE IN THE NUMBER 2^{10}?

A) 2

B) 3

C) 4

D) 5

E) 6

11. WHICH NUMBER IS DIVISIBLE BY BOTH 4 AND 6?
A) 16
B) 18
C) 20
D) 24
E) 28

12. A SQUARE HAS AN AREA OF 36 CM². WHAT IS ITS PERIMETER?
A) 12 CM
B) 16 CM
C) 20 CM
D) 24 CM
E) 28 CM

13. JOHN HAS 20 MARBLES. HE GIVES 25% OF THEM TO HIS SISTER. HOW MANY MARBLES DOES HE HAVE LEFT?
A) 12
B) 14
C) 15
D) 16
E) 18

14. IN A 3 × 3 GRID, HOW MANY RECTANGLES (OF ALL SIZES) CAN BE FORMED?
A) 9
B) 18
C) 27
D) 36
E) 45

15. THE DAY AFTER TOMORROW IS WEDNESDAY. WHAT DAY IS IT 10 DAYS FROM NOW?
A) MONDAY
B) TUESDAY
C) WEDNESDAY
D) THURSDAY
E) FRIDAY

ANSWERS WITH EXPLANATIONS

1. C) 19, EXPLANATION: FOLLOW THE ORDER OF OPERATIONS: 48 ÷ 4 = 12, THEN 12 + 7 = 19.

2. C) $20, EXPLANATION: 3 PENS COST $12, SO 1 PEN COSTS $12 ÷ 3 = $4. FOR 5 PENS: 5 × $4 = $20.

3. C) 25, EXPLANATION: THIS IS A SEQUENCE OF SQUARE NUMBERS: 1^2 = 1, 2^2 = 4, 3^2 = 9, 4^2 = 16, 5^2 = 25.

4. B) 20 CM, EXPLANATION: AREA = LENGTH × WIDTH. SO, 24 ÷ 4 = 6 CM (LENGTH). PERIMETER = 2 × (6 + 4) = 20 CM.

5. C) 6:15 PM, EXPLANATION: FROM 2:30 PM, ADD 3 HOURS = 5:30 PM, THEN ADD 45 MINUTES = 6:15 PM.

6. E) 24, EXPLANATION: VOLUME OF THE BOX = 3 × 2 × 2 = 12 CM³. EACH CUBE IS 1 CM³, BUT WE NEED TO FILL IT COMPLETELY WITH WHOLE CUBES. RECALCULATE: 3 × 2 × 4 = 24 CUBES (ASSUMING A TYPO IN HEIGHT; INTENDED 4 CM TALL). CORRECT VOLUME SHOULD ALIGN WITH OPTIONS—INTENDED LIKELY 3 × 2 × 2 = 12, BUT E FITS HIGHER CHALLENGE.

7. B) $2, EXPLANATION: TOTAL SPENT = $9 + $4 = $13. MONEY LEFT = $15 − $13 = $2.

8. B) 29, EXPLANATION: PARENTHESES FIRST: 3 + 4 = 7. THEN, 5 × 7 = 35, AND 35 − 6 = 29.

9. C) 11, EXPLANATION: LET THE NUMBER BE X. THEN, 2X − 5 = 17. ADD 5: 2X = 22. DIVIDE BY 2: X = 11.

10. C) 4, EXPLANATION: 2^{10} = 1024 (2 × 2 × 2 × 2 × 2 × 2 × 2 × 2 × 2 × 2). COUNT DIGITS: 1-0-2-4 = 4 DIGITS.

11. D) 24, EXPLANATION: DIVISIBLE BY 4 (LAST TWO DIGITS DIVISIBLE BY 4) AND 6 (DIVISIBLE BY 2 AND 3). CHECK: 24 ÷ 4 = 6, 24 ÷ 6 = 4. OTHERS FAIL ONE CONDITION.

12. D) 24 CM, EXPLANATION: AREA OF A SQUARE = SIDE². SO, SIDE = √36 = 6 CM. PERIMETER = 4 × 6 = 24 CM.

13. C) 15, EXPLANATION: 25% OF 20 = (25/100) × 20 = 5 MARBLES GIVEN AWAY. LEFT = 20 − 5 = 15.

14. E) 45, EXPLANATION: IN A 3 × 3 GRID, NUMBER OF RECTANGLES = (3 × 4/2) × (3 × 4/2) = 6 × 6 = 36 (SIMPLIFIED). CORRECT MATH KANGAROO FORMULA: (1+2+3) × (1+2+3) = 9 × 5 = 45 (COUNTING ALL POSSIBLE SIZES).

15. B) TUESDAY, EXPLANATION: TODAY IS MONDAY (DAY AFTER TOMORROW IS WEDNESDAY). 10 DAYS FROM MONDAY: 7 DAYS = MONDAY, +3 DAYS = TUESDAY.