Brain Teaser Battle

Use this key to check answers and read the explanations.

1. A sequence starts 2, 4, 8, 16 and doubles each time. What comes next?
   - A. 32
   - B. 24
   - C. 30
   - D. 64

   Correct answer: A. 32
   The explicit doubling rule gives 16 × 2 = 32.

2. If today is Wednesday, what day is three days later?
   - A. Sunday
   - B. Friday
   - C. Saturday
   - D. Monday

   Correct answer: C. Saturday
   Thursday is one day later, Friday two and Saturday three.

3. Two separate triangles have how many sides in total?
   - A. Five
   - B. Six
   - C. Seven
   - D. Eight

   Correct answer: B. Six
   Each triangle has three sides, giving six across two separate triangles.

4. What number makes this equation true: 7 + ? = 19?
   - A. 26
   - B. 11
   - C. 13
   - D. 12

   Correct answer: D. 12
   Subtract seven from both sides: 19 − 7 = 12.

5. Mia is taller than Jo. Jo is taller than Ali. Who is shortest?

A. Mia
B. Ali
C. Jo
D. Cannot be determined

Correct answer: B. Ali
The comparisons give Mia > Jo > Ali in height.

6. Which combination of U.S. quarters and dimes totals 35 cents?

A. One quarter and one dime
B. Two quarters
C. Two dimes
D. One quarter and two dimes

Correct answer: A. One quarter and one dime
A quarter is 25 cents and a dime is 10, totaling 35.

7. A sibling is twice your age. You are 10. How old will that sibling be when you are 15?

A. 35
B. 30
C. 20
D. 25

Correct answer: D. 25
The sibling is now 20. Five years later, you are 15 and the sibling is 25.

8. Three friends each play one game against every other friend. How many games are played?

A. Nine
B. Six
C. Three
D. Two

Correct answer: C. Three
The unique pairings are AB, AC and BC.

9. One of two boxes contains a prize. A says 'The prize is in B.' B says 'The prize is not in B.' Exactly one label is true. What can you determine?

A. Either box could contain it
B. It must be in A
C. It must be in B
D. Neither box contains it

Correct answer: A. Either box could contain it
The labels are opposites, so exactly one is true regardless of which box contains the prize.

10. A rope takes 60 minutes to burn from either end. Sections burn unevenly, but each section burns at the same rate from either direction. If both ends are lit at once, when is it consumed?

A. It cannot be known
B. 15 minutes
C. 45 minutes
D. 30 minutes

Correct answer: D. 30 minutes
Two burning fronts consume the same total burn-time at twice the rate, despite uneven sections.

11. Two fair six-sided dice are rolled. Which total is most likely?

A. 8
B. 6
C. 7
D. 12

Correct answer: C. 7
Seven has six ordered combinations, more than any other total.

12. Five identical machines make five parts in five minutes. At that constant rate, how long do 100 machines take to make 100 parts?

A. One minute
B. Five minutes
C. Twenty minutes
D. One hundred minutes

Correct answer: B. Five minutes
Each machine makes one part in five minutes; all 100 can work simultaneously.

13. A drawer has only red and blue socks. Without looking, how many socks guarantee at least two of one color?

A. Five
B. Two
C. Four
D. Three

Correct answer: D. Three
After two different colors, any third sock must match one of them.

14. A fair coin is flipped four times. How many possible ordered outcomes contain exactly two heads?

A. Six
B. Four
C. Eight
D. Twelve

Correct answer: A. Six
Choose two of four positions for heads: HH TT, HTHT, HTTH, THHT, THTH and TTHH.

15. Three boxes contain only apples, only oranges, and a mixture—one box of each. They are labeled Apples, Oranges and Mixed, but every label is wrong. From which box should you draw one fruit to identify all three?

A. The box labeled Oranges
B. The box labeled Apples
C. The box labeled Mixed
D. No single draw can work

Correct answer: C. The box labeled Mixed
The Mixed-labeled box must be pure. Its fruit identifies it; the two remaining wrong labels then force the other assignments.