1. Which number is the cube root of 8, prime and even?
A. 1  B. 8  C. 4  D. 2  E. 3

2. A square has a perimeter of 12cm. What is its area?
A. 8cm²  B. 9cm  C. 9cm²  D. Not enough info  E. Not a square

3. If I divide a positive whole number by ½ it will eventually:
A. = 0  B. get very small  C. get very big  D. stay the same  E. become negative

4. Which is not an acute angle?
A. 45°  B. 365°  C. 355°  D. 10°  E. 85°

5. Study Shapes a and b: Which of the following statements is correct?

A. They both have the same area and perimeter  
B. Shape a has a larger area yet their perimeters are equal  
C. Both have different areas and perimeters  
D. Shape b has a larger area yet their perimeters are equal  
E. We can't have a square

6. Which is not a cube number?
A. 1  B. 8  C. 3  D. 64  E. 27

7. If 5 miles is 8 kilometres, then 250 miles is:
A. 500km  B. 500m  C. 80km  D. 400km  E. none of these

8. Which point is furthest away from the origin on a standard graph axis?
A. -10,0  B. 0,0  C. 10,0  D. 0,-10  E. 0,11

9. Which integers satisfy the inequality 5 < x < 9?
A. 6,7,8 & 9  B. 5,6,7 & 8  C. 5 & 9  D. numbers larger than 4  E. none of these

10. Angles a, b and c are:

A. All Acute  B. All Obtuse  C. All Reflex  D. All right angles  E. All Between 45° & 120°

11. What is the next number in the sequence 8, 4, 2, 1
A. 0  B. ½  C. -1  D. -2  E. there is no pattern

12. One third is taken from one half. The result is:
A. One 6th  B. 0  C. 0.2  D. A half  E. It can't be done

13. Which one of the following statements is correct?

A. Angles a and b are equal  B. Angle a and b do not equal 180°  
C. Angle a is 80°  D. Angle b is 80°  E. Angles a and b equal 360°

14. When the Time is 3pm on an analogue clock. The hands make a 3 figure bearing of:
A. 90°  B. 090°  C. 90°  D. A reflex angle  E. 030°
15. The mean of 3 numbers is 17. The median is 17; the range is less than 4. The smallest value is:
A. >20
B. <20
C. 17
D. 18
E. 16

16. Consider the cuboid below. One of the following statements is correct:

A. The surface area and volume are equal
B. The surface area is less than the volume
C. The surface area is measured in cm³
D. The surface area is over 75cm²
E. We need the other dimensions to answer it

17. Bob spins the spinner once. What is the probability he would not land on a pen or chocolate?

A. one in 12
B. 50/50
C. 11/12
D. 1/3
E. Even

18. A bar of chocolate has 12 pieces. 4 are eaten on day one. The next day half the remaining amount is eaten. How much of the original bar is left?
A. ¾
B. A third
C. 0.65
D. 25%
E. 6 pieces

19. On a number line I travel from -4 to -6 and then to 12. What was the distance of my journey?
A. 20 units
B. 6 units
C. -5 units
D. 5 units
E. 0 units

20. If \( x = -4 \) then \( x^3 \) is
A. 16
B. 64
C. \( x^2 \)
D. -64
E. 1