

## Mathematics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	The gradient of the line joining (1, 4) and (-2, 5) is	A. 3/8 B. -2 2/3 C. -1/3 D. 2
2	If $x < y$ , $2x = A$ , and $2y = B$ , then	A. $A = B$ B. $A < B$ C. $A < x$ D. $B < y$
3	Which of the following is the equation of a line with slope 0 and passing through the point (4, 3)	A. $X = 4$ B. $X = -4$ C. $Y = 3$ D. $Y = -6$
4	Question Image	
5	Question Image	
6	Question Image	A. An equation B. Linear equation C. Rational fraction D. Identity
7	$\sin(a + b) + \sin(a - b) =$	A. $\sin a \cos b$ B. $\sin a \sin b$ C. $\sin a + \cos b$ D. $\sin a - 2 \cos b$
8	Complex roots of real quadratic equation occur in	A. Conjugate pair B. ordered pair C. reciprocal pair D. quadratic function
9	A function $F(x)$ is called even if	A. $F(x) = F(-x)$ B. $F(x) = F(x)$ C. $F(x) = -F(x)$ D. $2F(x) = 0$
10	Which is in the solution set of $4x - 3y < 2$	A. (3, 0) B. (4, 1) C. (1, 3) D. None
11	The complement of set A relative to universal set U is the set	D. $A - U$
12	Question Image	
13	Question Image	D. None of these
14	In which quadrant is the solution of the equation $\sin x - 1 = 0$	A. II quadrants B. II and III quadrants C. III and IV quadrants D. I quadrant
15	0 (Zero) is	A. An irrational number B. A rational number C. A negative integer D. A positive number
16	Question Image	D. None of these
17	Question Image	
18	The mid point of the line joining (-1, -3) to (3, -5) is	A. (1, 1) B. (1, -1) C. (2, -8) D. (1, -4)
19	Question Image	A. A polynomial B. An inequality C. An identity D. A linear function

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The direction cosines of y-axis are

- A. 1,0,0
- B. 0,1,0
- C. 0,0,1
- D. 1,1,1