

ECAT Mathematics Online Test

Sr	Questions	Answers Choice
1	The set of first elements of the ordered pairs in a relation is called its	A. domain B. range C. relation D. function
2	If A is a set then any subset R of $A \times A$ is called	A. relation on A B. relation on B C. relation from A to B D. relation from B to A
3	If A and B are two sets then any subset R of $B \times A$ is called	A. relation on A B. relation on B C. relation from A to B D. relation from B to A
4	If A and B are two sets then any subset R of $A \times B$ is called	A. relation on A B. relation on B C. relation from A to B D. relation from B to A
5	The number of subsets of a set having three elements is	A. 4 B. 6 C. 8 D. none of these
6	Question Image	
7	Question Image	
8	Question Image	
9	Question Image	
10	The multiplicative inverse of (a,b) is	
11	Question Image	A. (x, y) B. (kx, y) C. (x, ky) D. (kx, ky)
12	Question Image	
13	Question Image	A. x C. y
14	Every real number is	A. a positive integer B. a rational number C. a negative integer D. a complex number
15	Question Image	
16	The product of complex numbers (a,b) and (c,d) is	A. (ac, bd) B. (ac-bd, ad+bc) C. (ab,cd) D. (ac+bd,ad-bc)
17	The sum of complex number (a,b) and (c,d) is	
18	Question Image	A. 1 B. -1
19	Question Image	B. 1 C. -1
20	Question Image	A. real part of z B. imaginary part of z C. conjugate of z D. modulus of z
21	Question Image	

22	Question Image	B. 1 C. -1 D. 2
23	Question Image	A. real number B. complex number C. rational number D. irrational number
24	Question Image	A. additive property B. multiplicative property C. additive inverse D. additive identity
25	Question Image	A. additive property B. multiplicative property C. additive identity D. multiplicative identity
26	Name the property used in $a(b-c) = ab - ac$	A. commutative property of multiplication B. distributive property of multiplication C. associative property of multiplication D. multiplicative inverse
27	Name the property used in $1000 \times 1 = 1000$	A. additive inverse B. multiplicative inverse C. additive identity D. multiplicative identity
28	By expressing $\cos 113^\circ$ in terms of trigonometrical ratios, answer will be	A. $\cos 76^\circ = -0.7093$ B. $\cos 65^\circ = -0.4258$ C. $\cos 67^\circ = -0.3907$ D. $\cos 62^\circ = -0.8520$
29	By expressing $\sin 125^\circ$ in terms of trigonometrical ratios, answer will be	A. $\sin 65^\circ = 0.9128$ B. $\sin 55^\circ = 0.8192$ C. $\sin 70^\circ = 0.5384$ D. $\sin 72^\circ = 0.1982$
30	Sine rule for a triangle states that	A. $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$ B. $\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$ C. $\frac{a}{\sin A} + \frac{b}{\sin B} + \frac{c}{\sin C}$ D. $\frac{2a}{\sin A} = \frac{2b}{\sin B} = \frac{2c}{\sin C}$