GRE Quant Practice test 47

Question 1

If the roots of the equation $x^2 - 16x - 612 = 0$ are a and b, what is the value of $a + b$?

A -612

B -16

C 0

D 16

E 612

Question 2

If $\sqrt{x+6} + \sqrt{x+1} = 5$, what is the value of x^2?

A 1

B 4

C 9

D 16

E 25

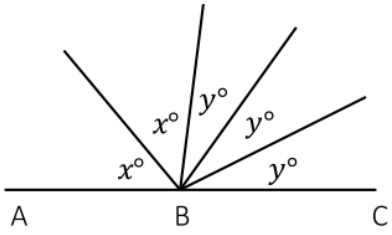
Question 3

If x and y are non-negative integers such that $2x + 3y = 8$ and $z = x^2 + y^2$, what is the maximum value of z?

A	0
B	5
C	13
D	16
E	25

Question 4

If ABC is a straight line as shown in the figure below, and the angles x & y are integer multiples of 20, what is the value of x?



A	20°
B	40°
C	60°
D	80°
E	100°

Question 5

If x is a non-negative integer such that $7^{\sqrt{x}} + 24^{\sqrt{x}} = 25^{\sqrt{x}}$, what is the value of x?

A 0

B 1

C 2

D 3

E 4