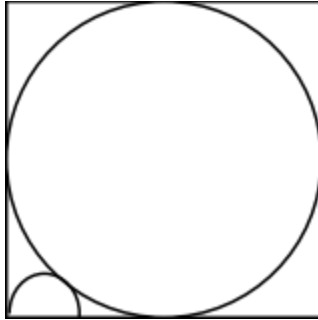


GRE QUANT PRACTICE PAPER – MULTIPLE CHOICE WITH ONE ANSWER

QUESTION 1

In the square shown above, the side is 2 units. The circle and the semicircle having its diameter along a side of the square, touch as shown. What is the radius of the smaller semicircle?



A $1/4$

B $2\sqrt{12}$

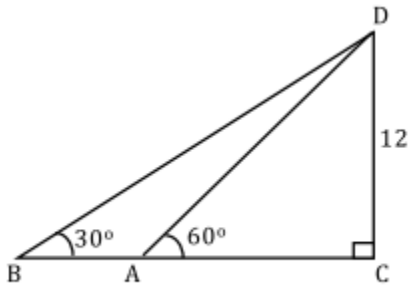
C $2 - \sqrt{12} - 1$

D $2\sqrt{12}$

E $1/2$

QUESTION 2

In the diagram shown above, if $CD = 12$, what is the length of AB ?



A $3\sqrt{3}$

B $4\sqrt{43}$

C $8\sqrt{83}$

D $12\sqrt{123}$

E $16\sqrt{3}$

QUESTION 3

A family consists of the father, mother, son and daughter. In the year 2015, the son, then aged 25 years moved away. The average age of the members, excluding the son, in the year 2018 is 24 years. What was the average age of the family in 2012?

A 17 years

B 18 years

C 19 years

D 20 years

E 21 years

QUESTION 4

Ten friends wish to raise funds for a get-together. Six of them contributed \$60 each while each of the other four friends contributed \$60 more than the average contribution of all ten friends. What was the total contribution of the ten friends?

A \$100

B \$600

C \$800

D \$1000

E \$1200

QUESTION 5

Per capita GDP of a country is defined as the ratio of the GDP, in million dollars, to the population, in millions, of the country. If the GDP of a country increased by 20% from 2015 to 2016 and at the same time, the population increased by 5%, what was the percent increase in 'Per capita GDP' of the country from 2015 to 2016?

A 4.0%

B 14.0%

C 14.3%

D 15.0%

E 26.0%

QUESTION 6

A man marks the price of an object at 20% above the manufacturing cost. He finally sells it at a discounted price and observed that the discount offered as a percent of the cost was the same as the profit he made as a percent of the initial marked price. What was his percent profit?

A 7.6%

B 9.1%

C 9.8%

D 10.0%

E 10.9%

QUESTION 7

A store sells two pieces of electronic items, one at 20% profit and another at 10% loss, respectively, thereby making an overall profit of 6%. What is the ratio of the cost prices of the two items?

A 8 : 9

B 1 : 1

C 8 : 7

D 4 : 3

E 7 : 2

QUESTION 8

The following data was observed for the variables x and y :

x	y
3	48
4	96
5	192

If $y = kx^n$, what is the value of $(k \times n)$?

A 3

B 4

C 6

D 8

E12

QUESTION 9

A sum of money, \$P, invested in a bank was found to become 4 times its value in every 4 years. If the value of the sum of money after t years is given by $P(1+r)^t$, what is the value of r ?

A 0.41

B 0.50

C 0.75

D 1.00

E 1.41

QUESTION 10

A car has a fuel efficiency of F miles per gallon if driven in city conditions. If the car was driven at a speed of D miles per hour, how many liters of diesel was used to travel for h hours? Assume 1 gallon = 3.8 litres.

A $\frac{3.8FDh}{10}$ liters

B $\frac{19Fh5D}{19Fh5D}$ liters

C $\frac{18Dh5F}{18Dh5F}$ liters

D $\frac{19Dh5F}{19Dh5F}$ liters

E $\frac{5Dh19F}{5Dh19F}$ liters