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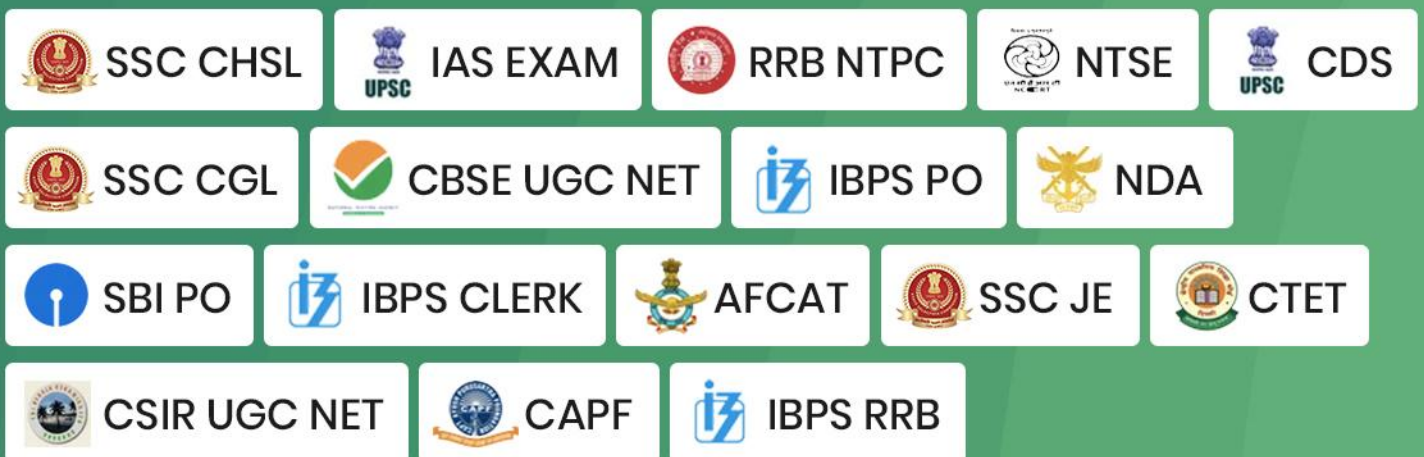
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Quantitative Aptitude Questions And Answers

Question 1.A & B together finish a job in 24 days, while A, B & C together can finish the same job in 8 days. C alone will finish the job in

a. 12 days

b. 14 days

c. 16 days

d. 24 days

Ans. 12 days

Explanation: The efficiency of (A + B) = 100/24 = (25/6)%;

The efficiency of (A + B + C) = 100/8 = (25/2)%;

The efficiency of C = 25/2 – 25/6 = (50/6)%;

Hence, C can alone finish this job in = 100/(50/6) = 12 days;

Question 2.Area of the circle inscribed in a square of diagonal 6√2 cm (in sq. cms) is

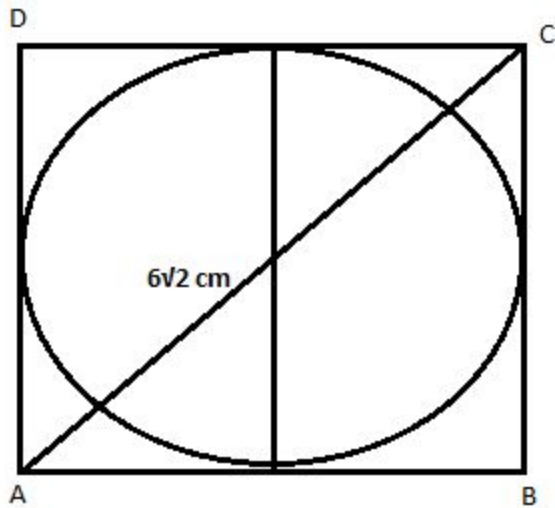# Quantitative Aptitude Questions And Answers

a. 9 Π

b. 6 Π

c. 3 Π

d. 9√2Π

Ans. 9 Π

Explanation: Diagonal of square = side* √2; => Side = 6 cms;

Side = Diameter = 6 cms; => radius = 3 cms;

Hence, the area of circle = 9π sq. cms

Quantitative Aptitude Questions And Answers

D
C

6√2 cm

A
B

Question 3. The original price of a TV set is Rs. 6,000. If the price is discounted by 20% and then raised by 10% for service contract, the price charged by the shopkeeper is

a. Rs. 5400

b. Rs. 5280

c. Rs. 5100

d. Rs.4200

Ans. Rs. 5280

Quantitative Aptitude Questions And Answers

Explanation: Original price = Rs. 6000;

Price after discount = 6000 – 1200 = Rs. 4800;

Price after raising service contract = 4800 + 480 = Rs. 5280

Question 4.A certain sum of money was divided between A, B and C in the ratio 5:6:9. If A received Rs. 450 the sum divided was

a. 2000

b. 1800

c. 2250

d. 1000

Ans. 1800

Explanation: Suppose the received money by A, B, and C is respectively 5x, 6x, and 9x.

5x = 450; => x = 90;

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Hence, the total money = 20x = 20*90 = Rs. 1800;

Question 5.By selling a bag at Rs. 230, profit of 15% is made. The selling price of the bag, when it is sold at 20% profit would be

a. Rs.250

b. Rs.205

c. Rs.240

d. Rs.200

Ans. Rs.240

Explanation: Suppose the Cost price of the bag= Rs. x;

Hence, x + 0.15x = 230; => x = Rs. 200;

Selling price after selling on 20% = 200 + 20% of 200 = Rs. 240

Question 6.The weights of two iron balls are 3.5 kg and 7.5 kg. What is the percentage weight of the 1st ball with respect to 2nd ball.

Quantitative Aptitude Questions And Answers

a. $46\frac{2}{3}\%$

b. 35%

c. $46\frac{1}{3}\%$

d. 45%

Ans. $46\frac{2}{3}\%$

Explanation: The required percentage = 3.5*100/7.5 = (140/3)%.

Question 7.A Bus travels at the speed of 36 km/h, then the distance covered by it in one second is

a. 10 m

b. 15 m

c. 12.5 m

d. 13.5 m

Ans. 10 m

Explanation: Distance traveled in one second = (36* 1000 meter)/(60 * 60 seconds); => 10 m

Quantitative Aptitude Questions And Answers

Question 8.

The value of $\frac{a}{a-b} + \frac{b}{b-a}$ *is*

a. (a+b)/(a-b)

b. -1

c. 2ab

d. 1

Ans. 1

Explanation:

= a/(a-b) – b/(a-b);

=(a-b)/(a-b) =1;

Question 9.The value of (1 - √2 + (√2 - √3 + (√3 - √4 + ... + (√15 - √16) is

Quantitative Aptitude Questions And Answers

a. 0

b. 1

c. -3

d. 4

Ans. -3

Explanation:

= (1 - √2 + (√2 - √3 + (√3 - √4 + ... + (√15 - √16);

= 1-√16 = 1 – 4= -3;

Question 10.△ABC and △DEF are two similar triangles and the perimeter of △ABC and △DEF are 30 cm and 18 cm respectively. If length of DE = 36 cm, then length of AB is

a. 60 cm

b. 40 cm

c. 45 cm

d. 50 cm

Ans. 60 cm

Explanation: As per the property of similar triangle,

perimeter of ∆ABC/ perimeter of ∆DEF = AB/DE;]

30/18 = AB/36; => AB = 60 cms

Question 11.If the length of a chord of a circle is equal to that of the radius of the circle, then the angle subtended, in radians, at the center of the circle by chord is
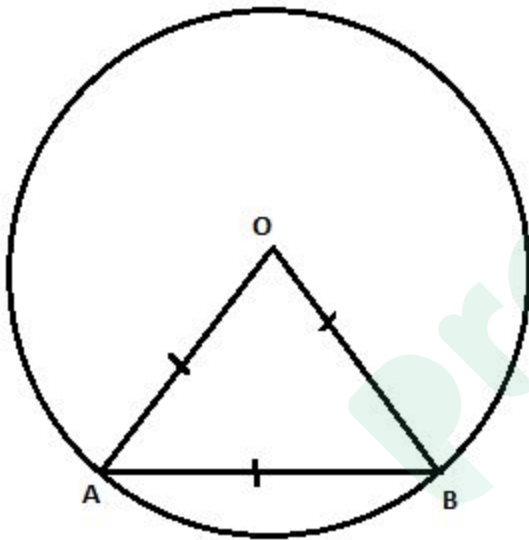
a. 1

b. ∏/2

c. ∏/3

d. ∏/4

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Ans. ∏/3

Explanation: From the given figure below, we can see that the triangle OAB is a equilateral triangle. Hence, each angle of this triangle will of 60 degrees, which in radian will be equal to ∏/3.

Question 12.The value of $(\sec^2 45 - \cot^2 45) - (\sin^2 30 + \sin^2 60)$ is

a. 1

b. 2√3

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c. 0

d. 1/√2

Ans. 0

Explanation: Put the numeric values of these trigonometric ratios-

= (√2)^2 – 1 –[(1/2)^2 + (√3/2)^2];

After simplifying the above expression,

= 0;

Question 13. The average salary of male employees in a firm was Rs. 5200 and that of females was Rs. 4200. The mean salary of all the employees was Rs. 5000. What is the % of female employees?

a. 80%

b. 20%

c. 40%

Quantitative Aptitude Questions And Answers

d. 30%

Ans. 20%

Explanation: Suppose the number of male employees = x; and the number of female employees = y;

5200*x + 4200*y = 5000*(x + y);

200x = 800y; =>x = 4y;

Hence, % of female employees = y*100/(x+y) = 100/5 = 20%.

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Question 14. If $4x = \sqrt{5}+2$, then find the value of $x-(1/16x)$?

a. 1

b. -1

c. 4

d. 2√5

Ans. 1

Explanation:

$4x = \sqrt{5} + 2;$

squaring both sides −

$16x^2 = 5 + 4 + 4\sqrt{5};$

$16x^2 = 9 + 4\sqrt{5};$

$16x = 4\sqrt{5} + 8;$

$x - \dfrac{1}{16x} = \dfrac{16x^2 - 1}{16x};$

putting the above values in the expression −

$x - \dfrac{1}{16x} = \dfrac{4\sqrt{5} + 8}{4\sqrt{5} + 8} = 1$

Question 15. The cube of 105 is

a. 1157625

b. 1175625

c. 1185625

d. 1158625

Quantitative Aptitude Questions And Answers

Ans. 1157625

Explanation: $(105)^3 = (100 + 5)^3$;

$= (100)^3 + (5)^3 + 3*100*5(100 + 5)$;

$= 1000000 + 125 + 150000 + 7500$;

$= 1157625$;

Question 16.In △ABC, ∠B is right angle, D is the midpoint of the side AC. If AB = 6 cm, BC = 8cm, then the length of BD is
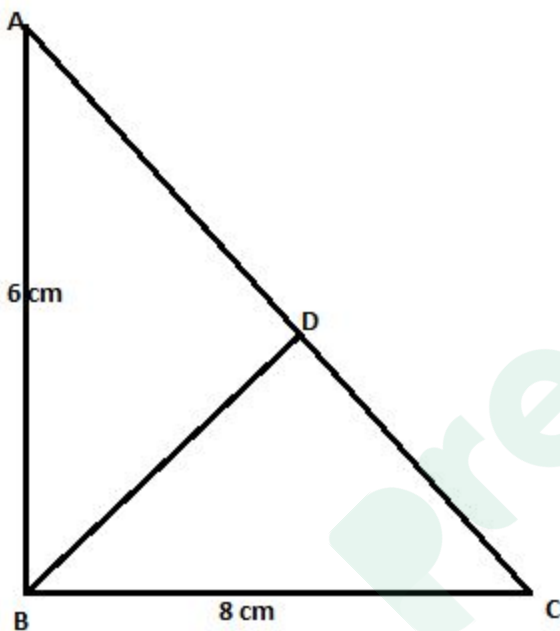
a. 4 cm

b. 5 cm

c. 8 cm

d. 12 cm

Ans. 5 cm

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Explanation: In right-angled triangle ABC, AC = √AB² + BC²= √6² + 8²= 10 cms.

Since, AD = BD = CD = AC/2 = 5 cms

Question 17.The diagonals of two squares are in the ratio 5:2.The ratio of their area is

a. 5:6

b. 25:4

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c. 5:4

d. 125:8

Ans. 25:4

Explanation: Diagonal of square = side*√2;

Side of first square a1= d1/√2;

Side of second square a2= d2/√2;

Ratios of the areas=$(a1)^2/(a2)^2$ = $(d1/√2)^2$ / $(d2/√2)^2$ = $(d1)^2/(d2)^2$ = 25: 4;

Question 18.The angle of elevation of a ladder leaning against a wall is 60 degrees and the foot of the ladder is 4.6 m away from the wall. The length of the ladder is
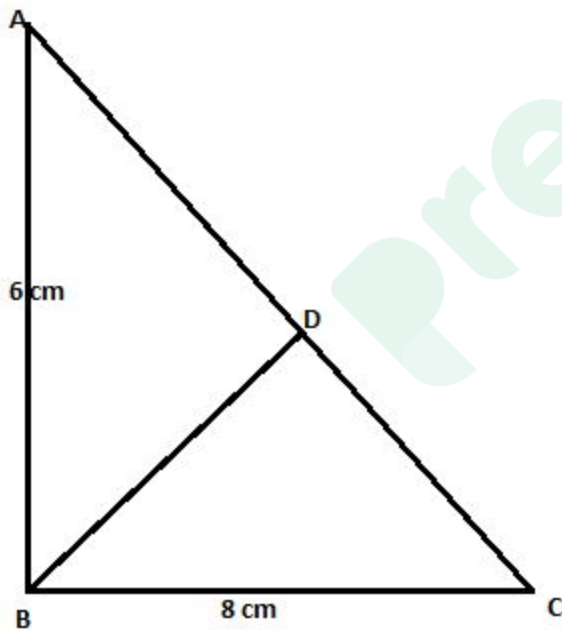
a. 2.3 m

b. 4.6 m

c. 9.2 m

Quantitative Aptitude Questions And Answers

d. 7.8 m

Ans. 9.2 m

Explanation: From the figure given below,

cos60 =4.6/h; => h = 4.6 * 2 = 9.2 m

Question 19.The product of two 2-digit numbers is 2160 and their H.C.F. is 12. The numbers are

Quantitative Aptitude Questions And Answers

a. (12, 60)

b. (72, 30)

c. (36, 60)

d. (60, 72)

Ans. (36, 60)

Explanation: only option (c.) follows the given condition because there product is equal to 2160 and HCF is 12.

Question 20.The difference between simple and compound interests compounded annually on a certain sum of money for 2 years at 4% per annum is Rs. 1. The sum (in Rs.) is:

a. 620

b. 630

c. 640

Quantitative Aptitude Questions And Answers

d. 625

Ans. 625

Explanation: Suppose the principal amount = Rs. P;

Simple Interest = P*4*2/100 = 2P/25;

Compound Interest = $P(1 + 4/100)^2$ -P = 51P/625;

(51P/625) – (2P/25) =1;

(51P – 50P)/625 =1;

P = Rs. 625;

Question 21.In a mixture of 25 liters, the ratio of milk to water is 4:1. Another 3 liters of water is added to the mixture. The ratio of milk to water in the new mixture is

a. 5:1

b. 5:2

Quantitative Aptitude Questions And Answers

c. 5:3

d. 5:4

Ans. 5:2

**Explanation:** The amount of milk in the mixture = (4/5) * 25 = 20 liters

The amount of water in the mixture = (1/5) * 25 = 5 liters

When added 3 liters of water, then total quantity of water = 8 liters;

The required ratio = 20: 8 = 5: 2.

Question 22.A constituency is divided in four regions A, B, C and D. Two candidates X & Y contested the last election from that constituency. The adjoining graph gives the break-up of voting in the four regions. Study the graph and answer the following question.

Quantitative Aptitude Questions And Answers
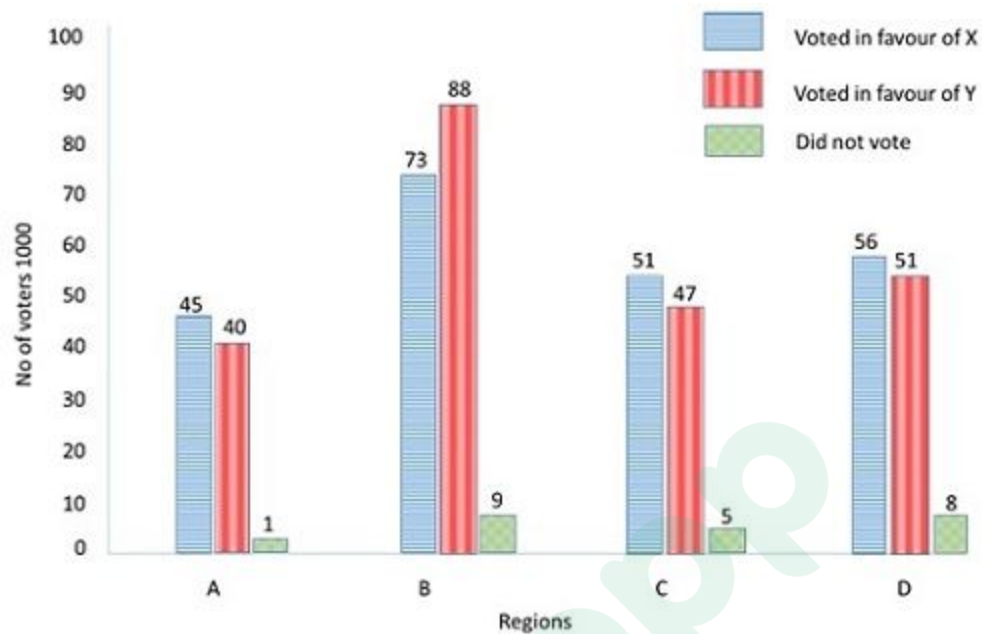
Approximately how much percent of voters voted in favor of X?
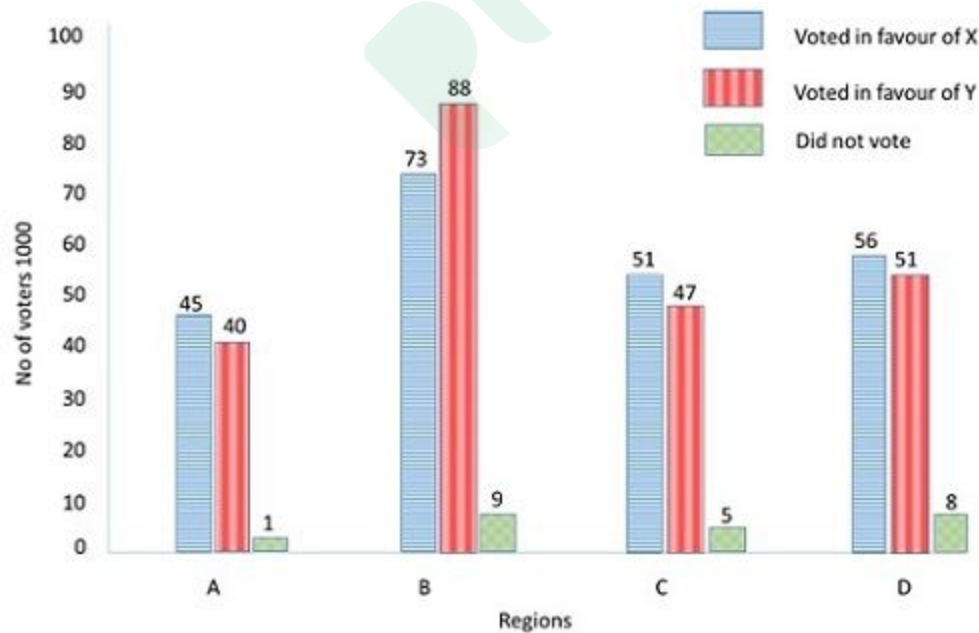
a. 45.4

b. 47.5

c. 50

d. 225

Ans. 47.5

Quantitative Aptitude Questions And Answers

Explanation: Total number of voters, who have voted in favor of X = 45 + 72 + 51 + 56 = 225;

Total Voters = (45 + 40 +1) + (73 + 88 + 9) + (51 + 47 + 5) + (56 + 51 + 8)=474;

The required percentage = 225*100/474 = 47.46%

Question 23.A constituency is divided in four regions A, B, C and D. Two candidates X & Y contested the last election from that constituency. The adjoining graph gives the break-up of voting in the four regions. Study the graph and answer the following question.

Quantitative Aptitude Questions And Answers

Approximately how much percent of voters did not caste their votes?

a. 4.9

b. 4.5

c. 0.23

d. 23

Ans. 4.9

Explanation: Total number of voters, who have not voted = 1 + 9 + 5 + 8 = 23;

Total Voters = (45 + 40 +1) + (73 + 88 + 9) + (51 + 47 + 5) + (56 + 51 + 8)=474;

The required percentage = 23*100/474 = 4.85%

Question 24.A constituency is divided in four regions A, B, C and D. Two candidates X & Y contested the last election from that constituency. The adjoining graph gives the break-up of voting in the four regions. Study the graph and answer the following question.

Quantitative Aptitude Questions And Answers
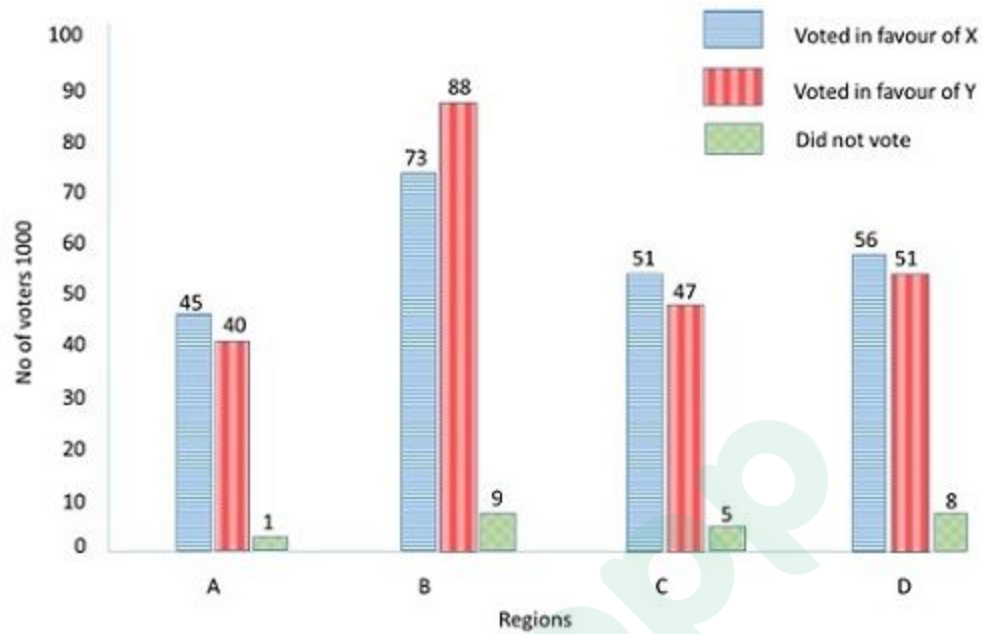
In region B, Y gets A% more votes than X. Find the value of A?

a. 24%

b. 21%

c. 19%

d. 15%

Ans. 21%

Quantitative Aptitude Questions And Answers

Explanation: % more voters for Y as compared to X= (88-73)*100/73 = 1500/73 =20.54%;

Hence, the required value of A = 21%.

Question 25.A constituency is divided in four regions A, B, C and D. Two candidates X & Y contested the last election from that constituency. The adjoining graph gives the break-up of voting in the four regions. Study the graph and answer the following question.
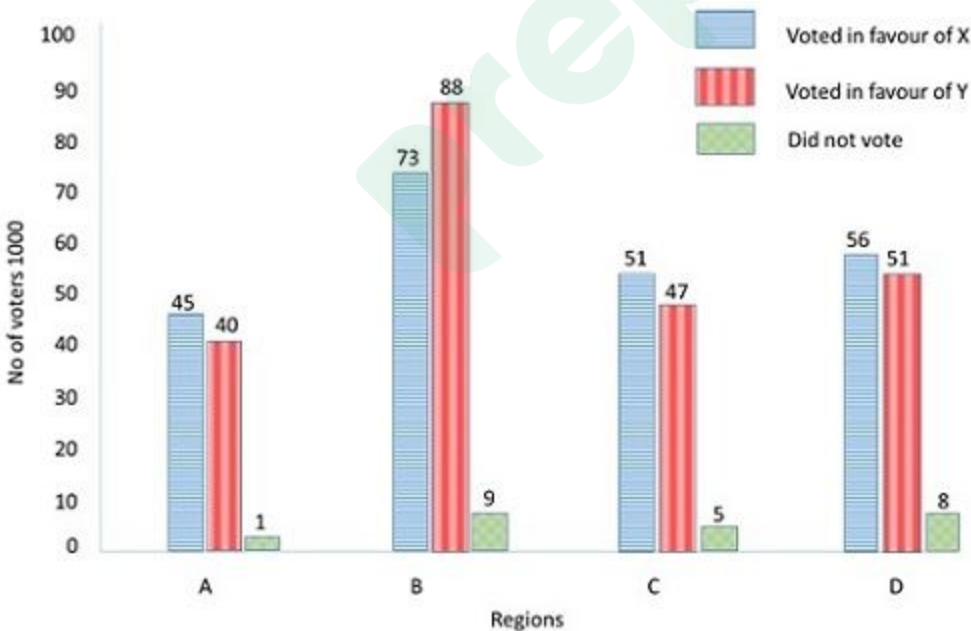
Nearly what percentage of his total votes did X receive from region B?

Quantitative Aptitude Questions And Answers

a. 30

b. 31

c. 32

d. 35

Ans. 32

Explanation: The required percentage = 73*100/(73 + 45 + 51 + 56) = 7300/225 = 32.44%

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