QUESTION : 1 - How many numbers are there from 300 to 650 which are completely divisible by both 5 and 7?

Options:
(A) 8
(B) 9
(C) 10
(D) 12

QUESTION : 2 - Raman can do a work in 5 days, Jatin can do the same work in 7 days and Sachin can do the same work in 9 days. If they do the same work together and they are paid Rs 2860, then what is the share (in Rs) of Raman?

Options:
(A) 1260
(B) 700
(C) 900
(D) 870

QUESTION : 3 - If the diameter of a sphere is 14 cm, then what is the surface area (in cm^2) of the sphere?

Options:
(A) 616
(B) 308
(C) 462
(D) 636

QUESTION : 4 - After two successive discounts of 20% and 35%, an article is sold for Rs 50700. What is the marked price (in Rs) of the article?

Options:
(A) 92500

(B) 98500

(C) 97500

(D) 94000

QUESTION : 5 - Rs 3200 is divided among A, B and C in the ratio of 3 : 5 : 8 respectively. What is the difference (in Rs) between the share of B and C?

Options:
(A) 400
(B) 600
(C) 800

(D) 900

QUESTION : 6 - The average of 5 members of a family is 24 years. If the youngest member is 8 years old, then what was the average age (in years) of the family at the time of the birth of the youngest member?

Options:
(A) 16

(B) 20

(C) 24

(D) 32

QUESTION : 7 - If the price of pen decreases by 20%, then a man can buy 10 more pens for Rs 100. What is the new price (in Rs) of each pen?

Options:
(A) 1

(B) 2

(C) 4

(D) 5

QUESTION : 8 - After deducting 60% from a certain number and then deducting 15% from the remainder, 1428 is left. What was the initial number?

Options:
(A) 4200
(B) 3962
(C) 4150
(D) 4300

QUESTION : 9 - A train travels 40% faster than a car. Both start from point A at the same time and reach point B, 140 km away at the same time. On the way the train takes 25 minutes for stopping at the stations. What is the speed (in km/hr) of the train?

Options:
(A) 67

(B) 134.4

(C) 145.9

(D) 160

QUESTION : 10 - A certain sum of money triples itself in 5 years at simple interest. In how many years it will be five times?

Options:

(A) 5

(B) 8

(C) 10

(D) 15

QUESTION : 11 - If x + (1/x) = 2, then what is the value of $x^{64} + x^{121}$?

Options:
(A) 0
(B) 1
(C) 2
(D) – 2

QUESTION : 12

If $x = 6 + 2\sqrt{6}$, then what is the value of $\sqrt{x-1} + \dfrac{1}{\sqrt{x-1}}$?

यदि $x = 6 + 2\sqrt{6}$, तो $\sqrt{x-1} + \dfrac{1}{\sqrt{x-1}}$ का मान क्या है?

Options:
(A) 2√3

(B) 3√2

(C) 2√2

(D) 3√3

QUESTION : 13 - If a + b + c = 27, then what is the value of $(a-7)^3 + (b-9)^3 + (c-11)^3 - 3(a-7)(b-9)(c-11)$?

Options:
(A) 0

(B) 9

(C) 27

(D) 81

QUESTION : 14 -

If $x = \dfrac{2\sqrt{15}}{\sqrt{3}+\sqrt{5}}$, then what is the value of $\dfrac{x+\sqrt{5}}{x-\sqrt{5}} + \dfrac{x+\sqrt{3}}{x-\sqrt{3}}$?

यदि $x = \dfrac{2\sqrt{15}}{\sqrt{3}+\sqrt{5}}$, तो $\dfrac{x+\sqrt{5}}{x-\sqrt{5}} + \dfrac{x+\sqrt{3}}{x-\sqrt{3}}$ का मान क्या है?

Options:
(A) √5

(B) √3

(C) √15

(D) 2

QUESTION : 15 - The perimeter of an isosceles triangle is 32 cm and each of the equal sides is 5/6 times of the base. What is the area (in cm^2) of the triangle ?

Options:
(A) 39
(B) 48
(C) 57
(D) 64

QUESTION : 16 - If length of each side of a rhombus PQRS is 8 cm and ∠PQR = 120°, then what is the length (in cm) of QS?
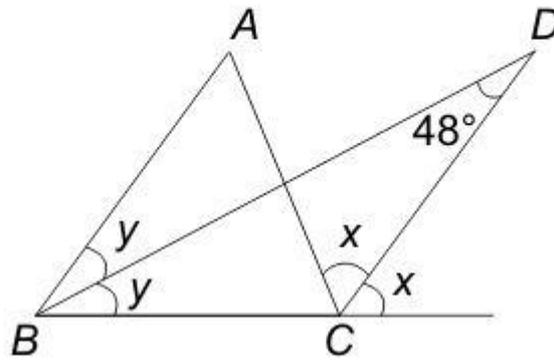
Options:
(A) 4√5
(B) 6
(C) 8
(D) 12

QUESTION : 17 -

In the given figure, *ABC* is a triangle. The bisectors of internal ∠*B* and external ∠*C* interest at *D*. If ∠*BDC* = 48°, then what is the value (in degrees) of ∠*A*?

दी गई आकृति में, *ABC* एक त्रिभुज है। ∠*B* तथा बाह्य ∠*C* का द्विभाजक बिंदु *D* पर प्रतिच्छेद करता है। यदि ∠*BDC* = 48° है, तो ∠*A* का मान (डिग्री में) क्या है?
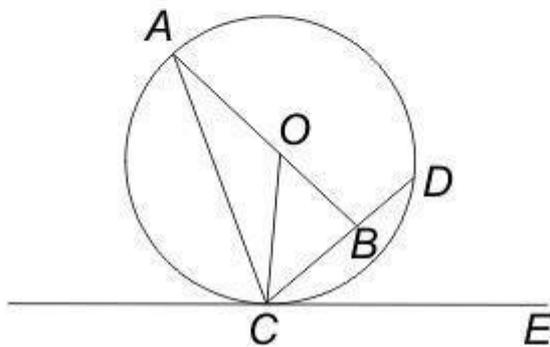

Options:

(A) 48

(B) 96

(C) 100

(D) 114

QUESTION : 18 -

In the given figure, O is the centre of the circle and $\angle DCE = 45°$. If $CD = 10\sqrt{2}$ cm, then what is the length (in cm) of AC · $CB = BD$

दी गई आकृति में, O वृत्त का केंद्र है, तथा $\angle DCE = 45°$ है। यदि $CD = 10\sqrt{2}$ से.मी. है, तो AC की लम्बाई (से.मी. में) क्या है? $CB = BD$

Options:
(A) 14

(B) 15.5

(C) 18.5

(D) 20

QUESTION : 19 -

What is the simplified value of $\dfrac{\sin 2A}{1+\cos 2A}$?

$\dfrac{\sin 2A}{1+\cos 2A}$ का सरलीकृत मान क्या है?

Options:
(A) tan A

(B) cot A

(C) sin A

(D) cos A
Correct Answer: tan A

QUESTION : 20 -

What is the simplified value of $\left(\dfrac{\sec A}{\cot A + \tan A}\right)^2$?

$\left(\dfrac{\sec A}{\cot A + \tan A}\right)^2$ का सरलीकृत मान क्या है?

Options:

(A) 1 – cos2A

(B) 2sin2A

(C) sec2A

(D) cosec2A

QUESTION : 21 - What is the simplified value of 1 + tan A tan (A/2)?
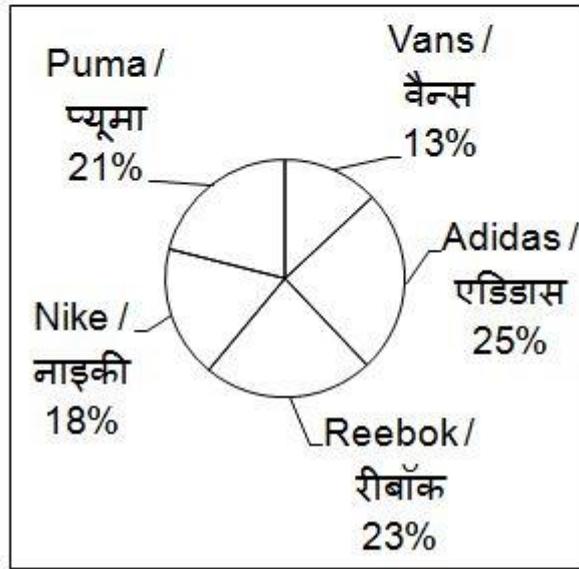
Options:
(A) sin A/2

(B) cos A

(C) sec A

(D) sin A

QUESTION : 22 -

The pie chart given below shows the number of shoes of 5 different brands in a multi brand store. There are total 1200 shoes.

नीचे दिए गए वृत्त चित्र में एक बहुब्राण्ड दुकान पर 5 विभिन्न ब्राण्डों के जूतों की संख्या को दर्शाया गया है। यहाँ कुल 1200 जूते हैं।

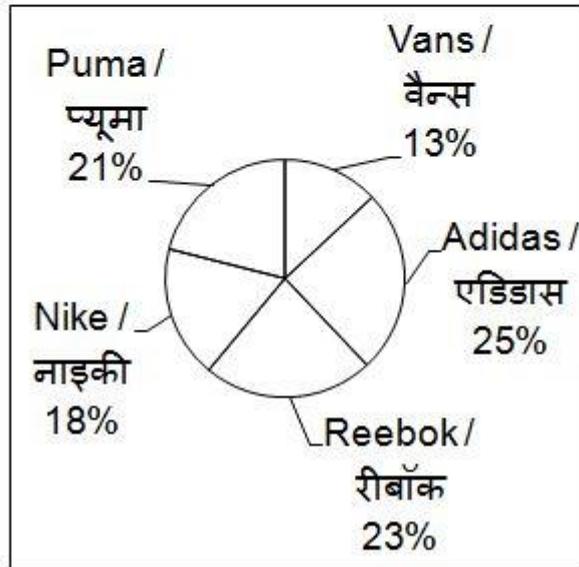How many shoes are there of Reebok brand?

Options:
(A) 230
(B) 276
(C) 286
(D) 216

QUESTION : 23 -

The pie chart given below shows the number of shoes of 5 different brands in a multi brand store. There are total 1200 shoes.

नीचे दिए गए वृत्त चित्र में एक बहुब्राण्ड दुकान पर 5 विभिन्न ब्राण्डों के जूतों की संख्या को दर्शाया गया है। यहाँ कुल 1200 जूते हैं।

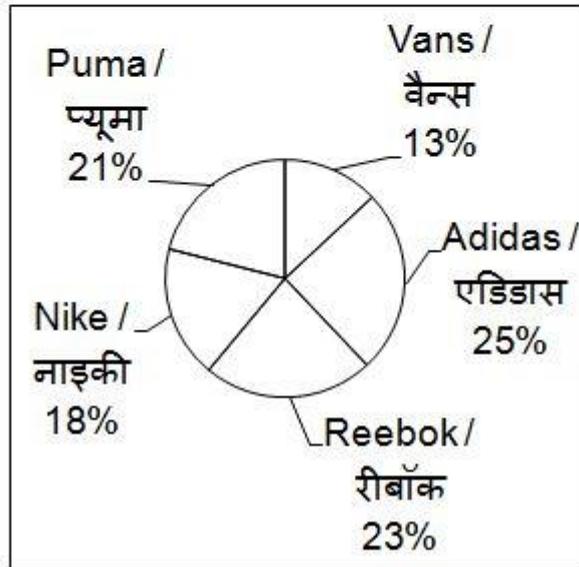What is the difference in number of shoes of Puma and Vans?

Options:
(A) 96
(B) 156
(C) 84
(D) 112

QUESTION : 24 -

The pie chart given below shows the number of shoes of 5 different brands in a multi brand store. There are total 1200 shoes.

नीचे दिए गए वृत्त चित्र में एक बहुब्राण्ड दुकान पर 5 विभिन्न ब्राण्डों के जूतों की संख्या को दर्शाया गया है। यहाँ कुल 1200 जूते हैं।

The difference between the number of shoes of Reebok and Nike is same as the difference between which of the following two brands?
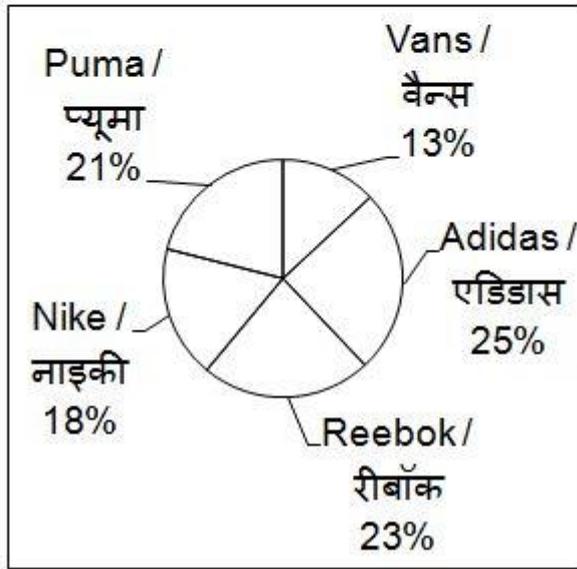
Options:
(A) Puma and Adidas
(B) Reebok and Adidas
(C) Vans and Nike
(D) Nike and Adidas

QUESTION : 25 -

The pie chart given below shows the number of shoes of 5 different brands in a multi brand store. There are total 1200 shoes.

नीचे दिए गए वृत्त चित्र में एक बहुब्राण्ड दुकान पर 5 विभिन्न ब्राण्डों के जूतों की संख्या को दर्शाया गया है। यहाँ कुल 1200 जूते हैं।

Puma shoes are how much percent more than the Nike Shoes?

Options:
(A) 14.28

(B) 16.66

(C) 25

(D) 21.33

Questions	Answer	Questions	Answer	Questions	Answer	Questions	Answer	Questions	Answer
1	C	2	A	3	A	4	C	5	B
6	B	7	B	8	A	9	B	10	C
11	A	12	A	13	A	14	D	15	B
16	C	17	B	18	C	19	A	20	A
21	C	22	B	23	A	24	C	25	B