

# Percentages

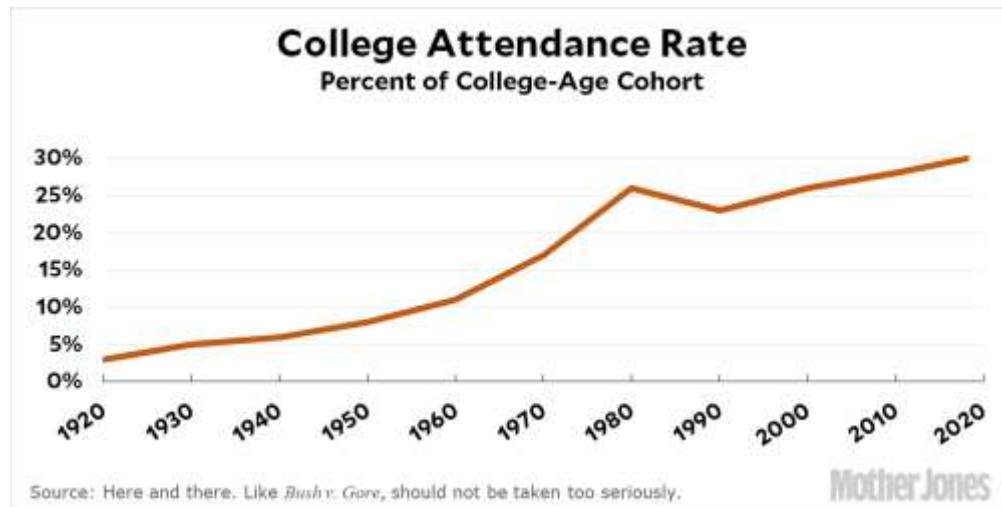
# Applications

1. Used to calculate Marks percentage.

$$\begin{aligned}\text{Percentage mark} &= \frac{40}{60} \times 100\% \\ &= \frac{40}{60} \times \frac{100}{1} \% \\ &= \frac{200}{3} \% \\ &= 66\frac{2}{3} \% \\ &= 67\%\end{aligned}$$

{Rounded to the nearest per cent}

2. Used to calculate Attendance percentage.



# Applications

You must have seen advertisements in newspaper, television and hoardings etc of the following type.

3. “Sale up to 60% off”.

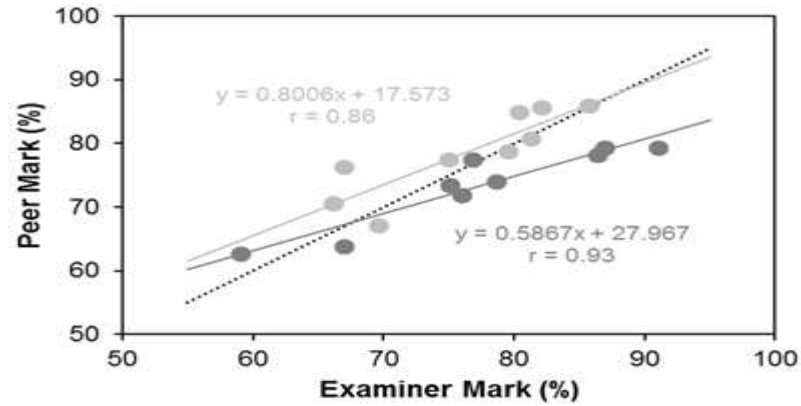


4. “Voters turnout in the poll was over 70%”.



# Applications

5. “Jampi got 93% aggregate in class XII Examination”.



6. “Banks have lowered the rate of interest on fixed deposits from 8.5% to 7%”.



**Start with  
as low as Rs 500**



In all the above statements the important word is “percentage”..so in all the above we use percentages.

# Model 1

## \*Model-1

1. What percent of 3.2 kg is 40 gms

1.25%

(b) 4%

(c) 7%

(d) 10%

4. If A is 50 % of C, C is 20 % of K , K is 40 % of Z , Then A/K is

a) 8/10

b) 6/60

c) 50/100

d) 50/200

5. A's salary is 60% of B's salary which is 40% of C's salary . What percentage of C's salary is A's salary

a)10

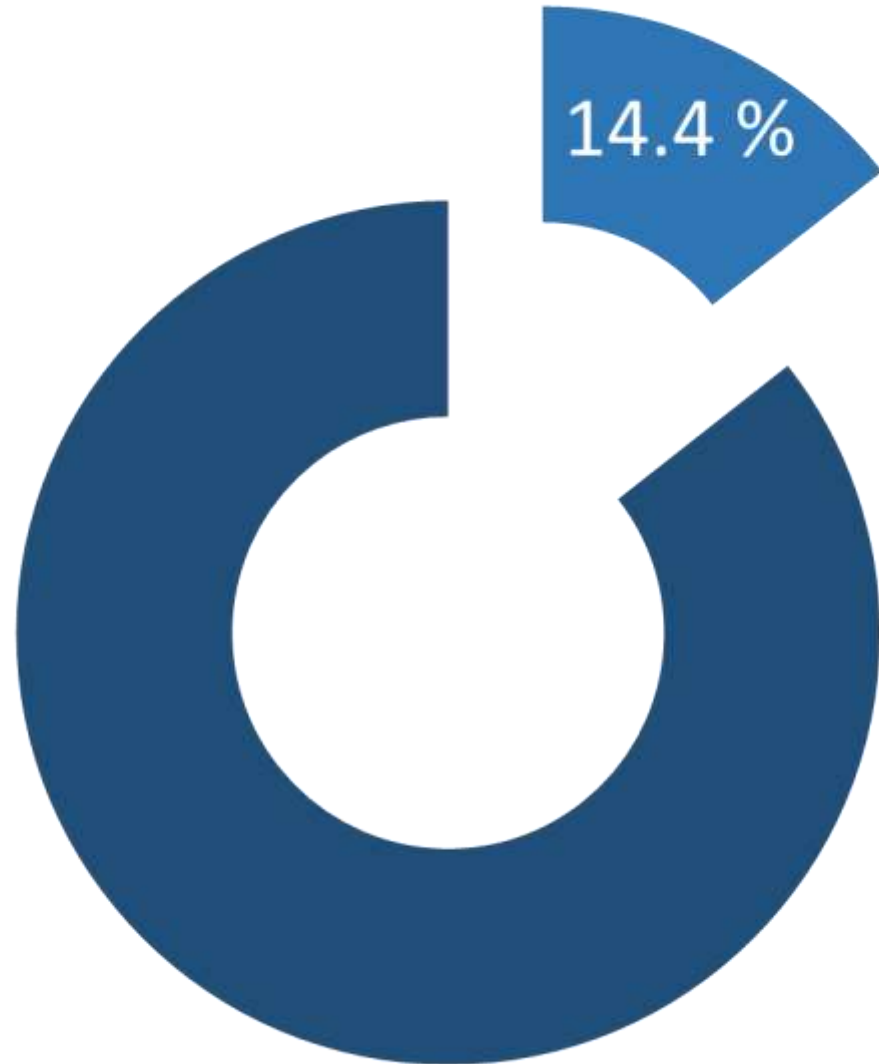
b)20

c)30

d)24



# Congratulations



# Model 2

8. A man's income is twice his expenditure. His expenditure is four times his savings. His savings are half his payments. What is his Income ?

- a) Twice his payments
- b) 200% more than his taxes
- c) 300% more than his taxes
- d) Eight times of his savings

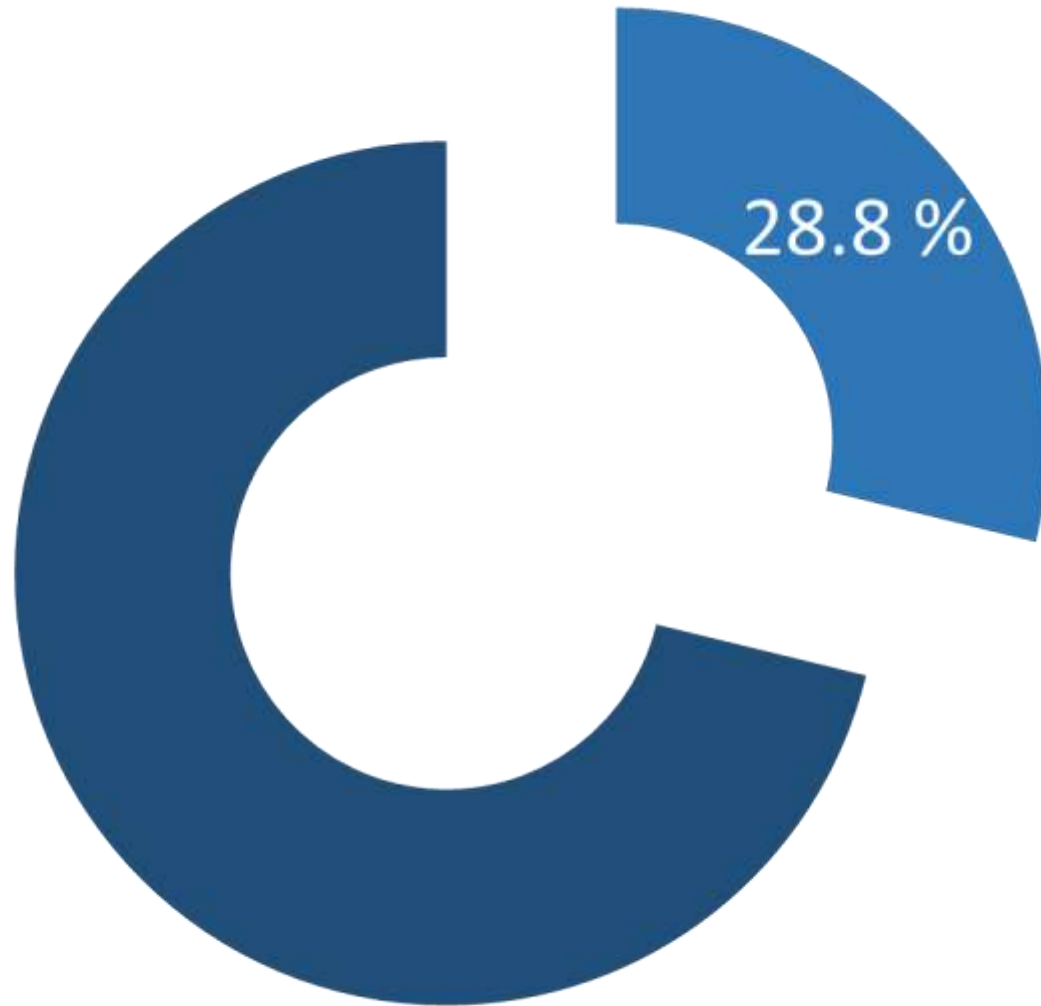
## \*MODEL-3

9. Rohit spends 30% of his salary on food, 20% on house rent, 5% on entertainment and 5% on conveyance. If his savings at the end of a month are Rs. 8000, then his monthly salary is:
- (a) Rs. 20,000
  - (b) Rs. 25,000
  - (c) Rs. 30,000
  - (d) Rs. 34,000

10. Krishna earns 40,000 p.m . He spends 20% on taxes. Of the remaining, he spends one - fourth on rent, half on petrol, one third on electricity and rest goes in the savings . What amount of Krishna's income is he able to save ?

- a) 10,000
- b) 20,000
- c) 8,000
- d) 12,000

# Congratulations



# Model 3

13. The price of a T.V. set is decreased by 30% as a result of which the sale is increased by 20%. What will be the effect on the total revenue of the shop?

- (a) 16% decrease
- (b) 16% increases
- (C) 24% increases
- (d) 10% Decrease



15. If the price of the petrol is increased by 20% , by how much percent a car owner must reduces his consumption in order to maintain the same budget?

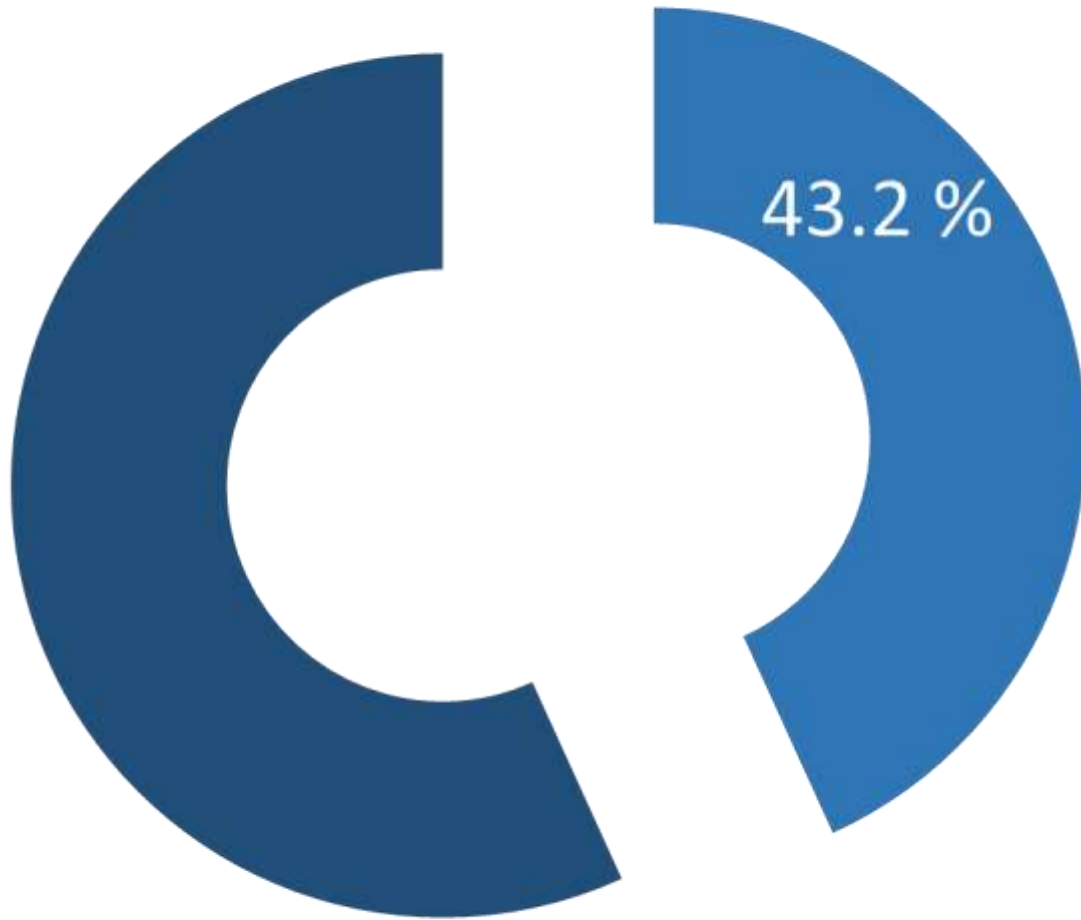
(a)18.6%

(b)17.6%

(c)16.6%

(d)15.6%

# Congratulations



# Model 4

16. A student has to obtain 33% of the total marks to pass. He got 125 marks and failed by 40 marks. The maximum marks are :

- A) 500
- B) 600
- C) 800
- D) 1000

17. 800 boys and 400 girls are examined. 60% of boys and 50% of girls passed . What is the overall percentage of students failed?

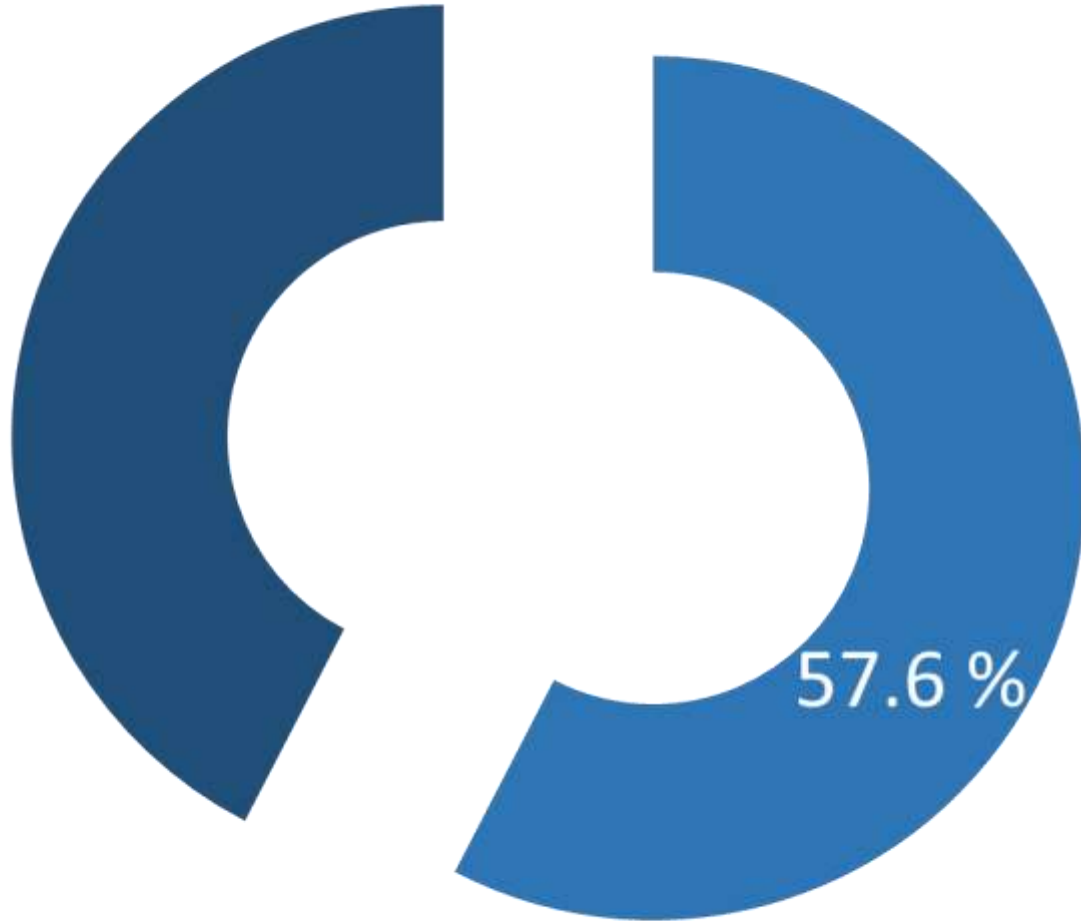
a)43.33

b)33.33

c)53.33

d) none

# Congratulations



# Model 5

20. In an election a candidate who gets 64% of the votes is elected by a majority of 420 votes. What is the total number of votes polled?

(a) 1500

(b) 600

(c) 400

(d) 1000



21. 10% of the voters did not cast their votes in an election between two candidates , 20% of the voters polled were found invalid . The succeeded candidate got 70% of the valid votes and won by a majority of 720 votes . find the total number of votes listed?

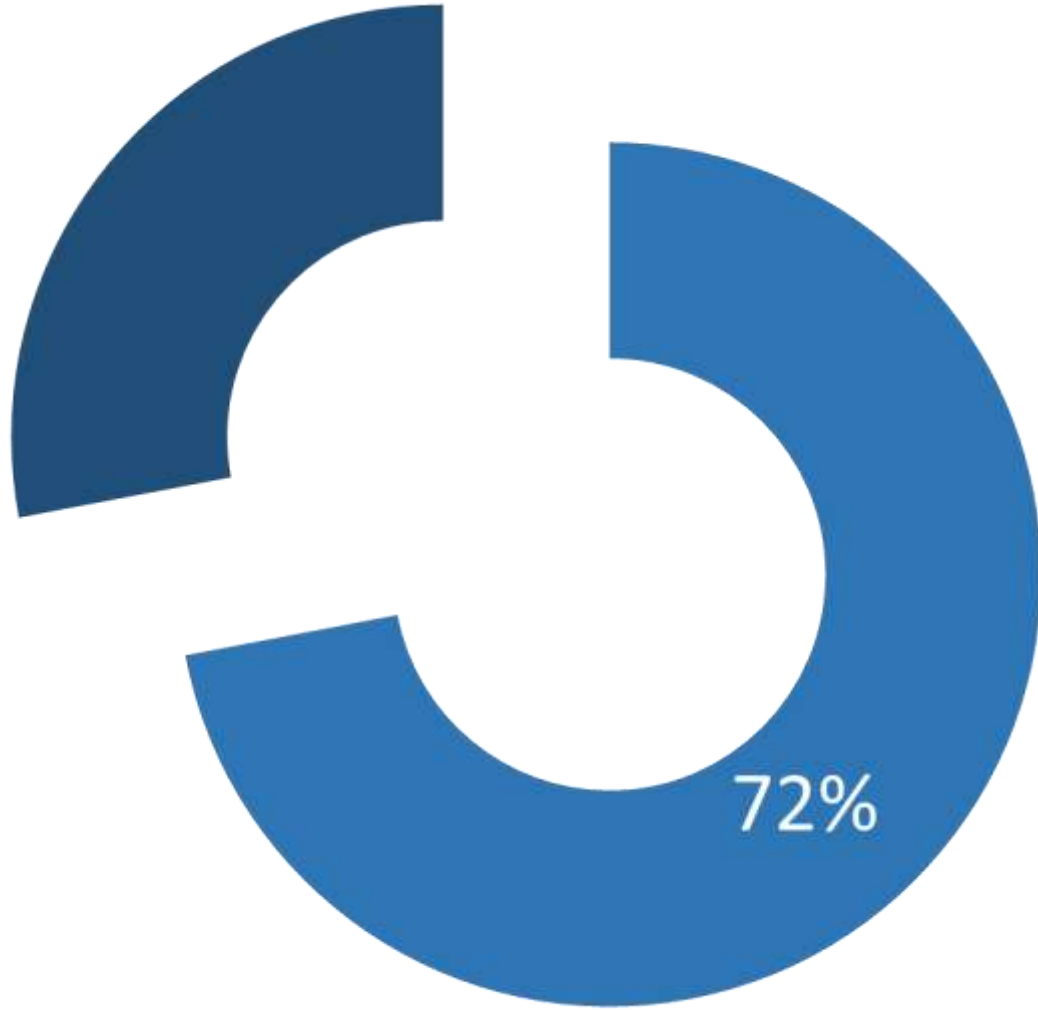
a)2500

b)3000

c)2000

d)4000

# Congratulations



# Model 6

23. Length , Breadth and Height of a cuboid is in the ratio 1:2:3 initially. If the length is doubled and Breadth & height are halved , then what is the change in the volume of the cuboid?

- a) Decreased by 15%
- b) Decreased by 30%
- c) Decreased by 50%
- d) Decreased by 18%

25. Each edge of a cube is increased by 30% then the percentage increase in surface area of the cube is :

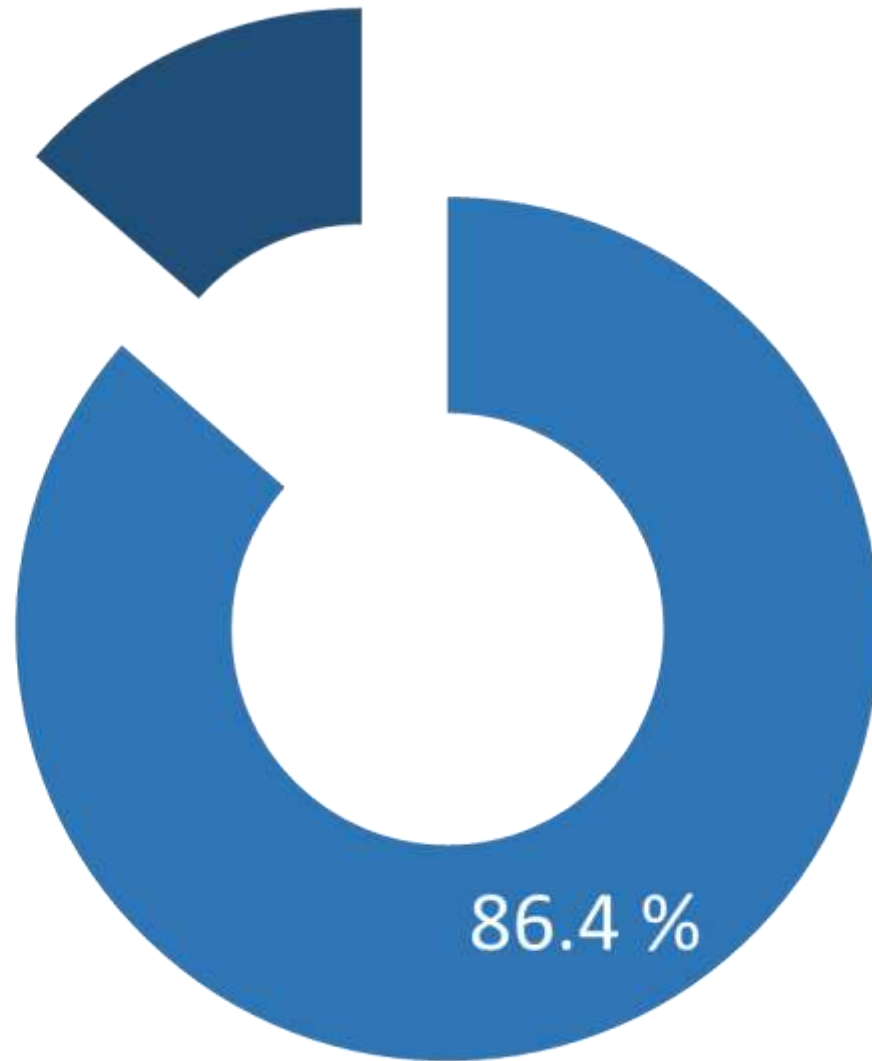
a)144%

b)40%

c)44%

d)69%

# Congratulations



# Model 7

26. A survey of  $n$  people in the town of Badaville found that 20% of them prefer brand A. Other survey of 150 people in the town of Chottaville found that 50% prefer brand A. In total 40% of all the people surveyed together prefer Brand A. What is the total number of people surveyed?

- a) 500
- b) 225
- c) 450
- d) none



27. In 50 gm alloy of gold and silver the gold is 80% by weight. How much gold should be mixed to this alloy so that the weight of gold would become 95%

(a) 200gm

(b) 150gm

(c) 50gm

(d) 10gm

# Congratulations

