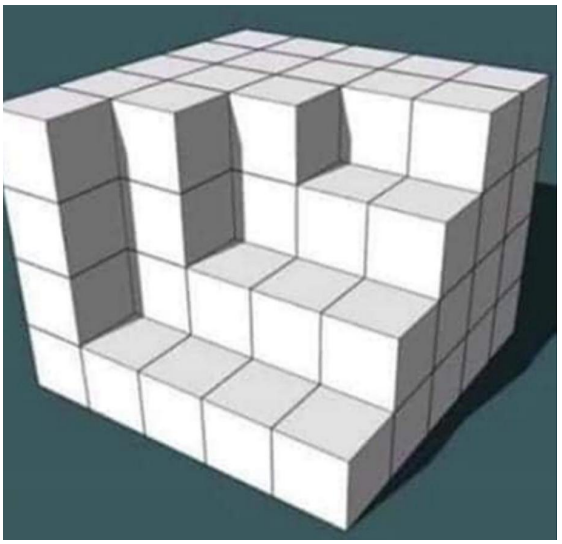
Sample Questions

STEMCO Mathematics

Primary Senior

1. The picture below shows a set of blocks:



How many cubical blocks are needed to complete this cuboid?

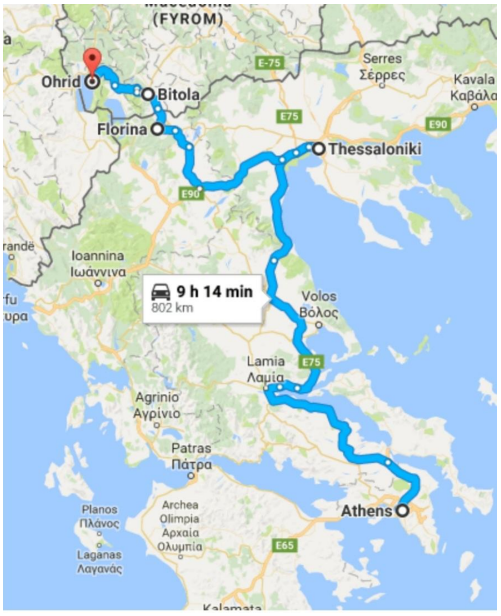
A. 12
B. 16
C. 20
D. 24

2. In a large bag of M&Ms 30% are brown candies and 18% are yellow candies. Your friend ate all the brown candies. You counted 63 yellow candies and ate them all.

How many candies are left in the bag?

A. 105
B. 182
C. 168
D. 156

3. The distance between Athens and Ohrid is 420 km. Two cars left from Athens to Ohrid at the same time. One car is 10 km/h faster than the other car. The first car reached Ohrid one hour earlier than the second car.



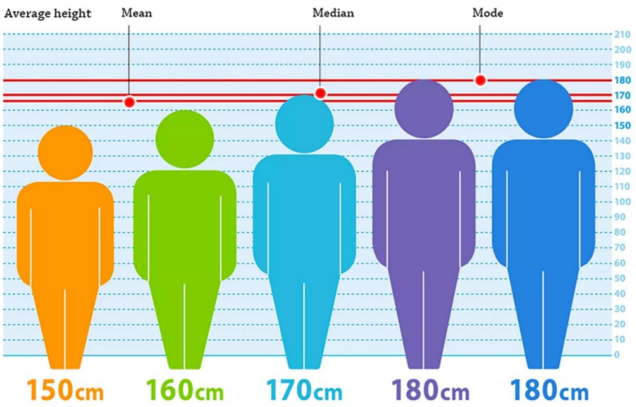
What was the speed of the second car?

A. 60 km/h
B. 70 km/h
C. 50 km/h
D. 80 km/h

4. The concept of average is important when analyzing large sets of data. For example:

a) What is the most common height in your class?
b) Who is taller on average, girls or boys, in your classroom?
c) If you arrange your classmates in order of increasing height, how tall is the person in the middle?

All these questions require the consideration of average values. However, each of these questions asks a different kind of average.



What is the correct matching between the questions and the type of average?

A. 1 - mode, 2 - mean, 3 - median
B. 1 - mean, 2 - mode, 3 - median
C. 1 - median, 2 - mode, 3 - mean
D. 1 - mode, 2 - median, 3 - mean

5.

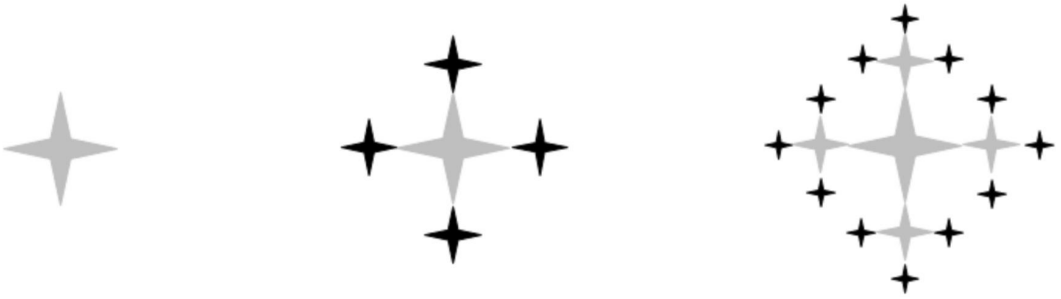


Figure 1 (1 star)

Figure 2 (5 stars)

Figure 3 (17 stars)

What is the total number of stars in Figure 6?

A. 300 - 350
B. 350 - 400
C. 400 - 450
D. 450 - 500

Answers

1. C
2. B
3. A
4. A
5. D