Matteutmaningen

March 2025

There will be five answer choices per question. Only answers are required. No digital tools or reference sheets are allowed. Writing time: 60 minutes.

Name and class:

School:

Answer Sheet

Instructions: Mark your answer in the following table, only one mark per question, multiple marks will result in 0 points. The tiebreaker question is used to decide the victor in a tie. Write your answer as a number in the tiebreaker box.

Question	Α	В	C	D	\mathbf{E}
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20					
Tiebreaker Question					

1 Green

- Which of the following five numbers is the largest?
 A. 0.5 B. 1.98 C. 1.99 D. 0.9999999 E. 1.9899999999
- 2. Adam starts school at 8:30 on a Tuesday. He has a total of 4 hours of lessons, 1 hour of lunch, and 45 minutes of break before he finishes. When does Adam finish?

A. 14:30 B. 14:15 C. 13:45 D. 5:45 E. 14:00

3. In 2019, marathon runner Eliud Kipchoge set a new world record for the marathon with a time of 1 hour, 59 minutes, and 40 seconds. If you round this to the nearest minute, how many minutes did Eliud run?

A. 160 B. 560 C. 159 D. 15940 E. 120

- 4. How many corners does a cube have?
 - A. 2 B. 6 C. 4 D. 8 E. 16
- 5. You have a 50-krona bill, three 10-krona coins, and one 5-krona coin. How much more money do you need to exchange this for a 100-krona bill?

A. 15 kr B. 50 kr C. 25 kr D. 100 kr E. 0 kr

- 6. Which number is twice as large as 29?
 A. 60 B. 70 C. 58 D. 45 E. 48
- 7. What is the largest whole number that is less than 371?
 A. 11 B. 360 C. 37 D. 370.999999 E. 370
- 8. Beata is very thirsty and is going to mix raspberry cordial. Each decilitre (dl) of concentrate should be mixed with nine decilitres (dl) of water. How much concentrate should Beata use to get one litre of diluted syrup?
 - A. 1 dl B. 9 dl C. 0.11 dl D. 1 l E. 0 dl

2 Blue

9. When the clock shows 3:00 PM, the minute hand and the hour hand form an angle between them. How many degrees is this angle?

A. 10 B. 150 C. 90 D. 180 E. 360

- 10. Karl has a package of butter on his table. It takes 3 hours for the package to completely melt. If he has two separate butter packages on the table, how long will it take for both packages to completely melt?A. 6 hours B. 3 hours C. 1.5 hours D. 1 hour E. 2 hours
- A sweater is on a 20% discount and now costs 160 Kr. How much did the sweater originally cost?
 A. 192 Kr B. 200 Kr C. 32 Kr D. 360 Kr E. 100 Kr
- 12. Which shape has more edges, a cube or a rectangular prism?A. A rectangular prism B. A cube C. They have the same number of edges D. It depends on the size of the cube E. More information is needed
- 13. One millilitre (ml) of water weighs one gram (g) at room temperature. How much does one litre (l) of water weigh?

A. 1000 g $\,$ B. 1000 kg $\,$ C. 10 kg $\,$ D. 100 hg $\,$ E. 100 g

14. You have a square with a side length of 3 cm, and you also have a triangle where the height is twice as high as the square and the base is half as wide as the square. Does the square or the triangle have a larger area?

A. It depends on the shape of the triangle B. The triangle has the largest area C. It is impossible to know D. They have the same area E. The square has the largest area

15. Nellie is sitting in a car travelling at a speed of 60 km/h (60 kilometres per hour). How far does Nellie travel in 20 minutes?

A. 30 km B. 20 km C. 60 km D. 40 km E. 50 km

3 Red

- 16. There is a farm with cows, cats, and chickens. In total, there are 20 legs and 7 heads (not counting the farmer). There is at least one of each animal, and all animals have all their legs. What is the maximum number of cows that can be on the farm?
 - A. 1 B. 2 C. 3 D. 4 E. 5
- 17. What is the sum of all even numbers from 0 to 100?
 A. 2500 B. 5050 C. 2550 D. 5000 E. 2525
- 18. If you roll 100 six-sided dice and take their sum, which number are you most likely to get?A. 300 B. 100 C. 600 D. 350 E. 700
- 19. Omar has a field with special dandelions. The area covered by the dandelions doubles every day. It takes 50 days for the dandelions to cover the entire field. How many days does it take for the dandelions to cover half the field?
 - A. 50 B. 29 C. 25 D. 35 E. 49
- 20. You have ten numbers, and the average of these numbers is 100. Five of these numbers are greater than 100. Which of the following statements must be true?
 - A. All the other numbers must be less than 100
 - B. The majority of the other numbers must be less than 100
 - C. The sum of all ten numbers must be greater than 1000
 - D. At least one number must be less than 100
 - E. None of these statements are correct

4 Tiebreaker Question

21. The expression 13! is read as "13 factorial". Factorial means you take the product of a number with its preceding numbers. For example, 5! = 5 * 4 * 3 * 2 * 1 and 10! = 10 * 9 * 8 * 7 * 6 * 5 * 4 * 3 * 2 * 1. Calculate 13! write your answer as a whole number in the tiebreaker box.