

Mathematics

Delprov D

Årskurs

6

Elevens namn och klass/grupp

For the tasks in this part, you must show your working. Your working must be clear enough so that another person can read and understand what you mean.

If you make calculations on the calculator they must be shown on the paper. You can be given points for partially solving a problem.

The teacher will assess:

- How you solve the problems.
- What knowledge you show about mathematical concepts.
- Which methods you choose and how you use them.
- How well you show your working.
- How well you use mathematical language.



You will get to meet Leo, Maja, Kevin and Samira who are in year 6. At their school all classes will have a whole day where they work with the Olympic Games as a theme. They will have many different sports events including: gymnastics, cycling, long jump, 60 metre race and diving.

There will be opportunities to win medals in the different events but everyone who participates gets a prize. Medals and prizes are in little boxes and Samira and Leo are helping out with unpacking them.

On the school's Olympic day, lunch is served outside. The pupils can choose between different types of sausages, bread and drinks.

25. Leo, Samira and Maja also do the long jump. (2/0/0)

- Leo's jump is the longest, he jumps 419 cm.
- Samira jumps 5 cm longer than Maja.
- There is a difference of 26 cm between the longest and the shortest jump.

How long is Samira's jump?

Show your working.

26. Kevin pours 8 dl of water into his water bottle.
He drinks some of the water, leaving 25 cl in the bottle.
How much did he drink?

Show your working.



(2/0/0)

27. The school had a cycle race.

(2/0/0)

There were 120 pupils participating, but only $\frac{4}{5}$ of them crossed the finish line.

How many finished?

Show your working.



28. Another of the competitions involved running 60 m.
In the list, you can see the results for some of the pupils.

Name	Time (seconds)
Leo	9.15
Kevin	9.20
Samira	8.99
Maja	9.02
Sandra	9.07
Alice	?

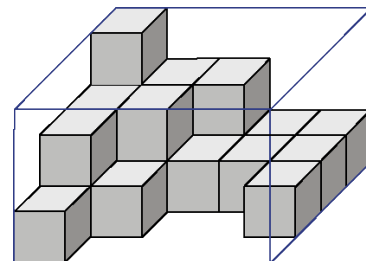


- a) Who ran it in 9 seconds and 2 tenths of a second? (1/0/0)

Write the answer only: _____

- b) Alice's time was 11 tenths of a second slower than Samira.
What was Alice's time? (0/2/0)
Show your working.

29. Leo has stacked small boxes of the same size into a larger box. (1/1/0)
How many small boxes will fit into the larger box?
Show your working.



30. In diving, 0–10 points are awarded for each dive. Whole and half points can be awarded.

Maja's and Kevin's results

	Maja	Kevin
First dive	7.5	?
Second dive	5	8
Third dive	5.5	?
Mean	?	7.5



- a) What is the mean of Maja's points?
Show your working.

(2/0/0)

- b) Kevin's mean is 7.5 points. Which points can Kevin have received in his first and third dives? Investigate possible solutions and give several suggestions.
Show your working.

(0/2/1)

31. Kevin, Leo, Samira and Maja have all turned 13 years old.
In how many years will their combined ages total 100?
Show your working.

(1/2/0)

32.  = 340 g

(0/1/2)

 = 320 g


 = 210 g

How much does a gold medal weigh?
Show your working.

33. On the school's Olympic day, the pupils choose food and something to drink for lunch. They make three choices.

Choose bread, sausage and drink

- **White bread** or **Wholemeal bread**
- **Hot dog** or **Chicken sausage** or **Vegetarian sausage**
- **Water** or **Juice** or **Milk** or **Lemonade**



- a) Samira has chosen vegetarian sausage. (2/0/0)
Now she will choose bread and a drink.
How many different lunch combinations can she make?
Show your working.
- b) Kevin has not decided yet. (0/2/0)
He will choose bread, sausage and a drink.
How many different lunch combinations can he make?
Show your working.

