

# Mathematics

## Delprov B

Elevhäfte

# 1a

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Elevens namn och klass/grupp



## Instructions – Part B

**Time for the test** 60 minutes for Part B.

**Aids** Allowed aids on Part B are formula sheet and ruler.

**Tasks** This part consists of tasks to be solved without using digital devices. Some of the tasks require working, which is to be shown in the figure and the box next to the task. For the other tasks only the answer is required. The maximum number of points that you can get for your answer/solution is shown after each task.

**Grading limits** The test (Part A–D) gives a total maximum of 78 points.

Limit for test grade

E: At least 21 points.

D: At least 34 points of which at least 10 points at level C or higher.

C: At least 44 points of which at least 19 points at level C or higher.

B: At least 54 points of which at least 5 points at level A.

A: At least 61 points of which at least 9 points at level A.

Name: \_\_\_\_\_

Date of birth: \_\_\_\_\_

Secondary program: \_\_\_\_\_ Class: \_\_\_\_\_

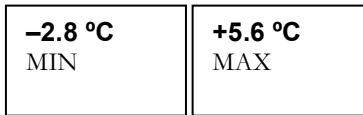
Illustration: Jens Ahlbom

1. How many millions does the calculator display?



Answer: \_\_\_\_\_ m (1/0/0)

2. A min-max thermometer indicates the lowest and highest temperature. How large is the difference in temperature on this winter's day?



Answer: \_\_\_\_\_ °C (1/0/0)

3. Below are five bags. Which bag weighs closest to 3.5 kg?  
Circle your answer.



(1/0/0)

4. Which of the following numbers is the closest approximate value to  $148 \cdot 0.53$ ?  
Circle your answer.

50          80          100          300          750

(1/0/0)

5. One tablespoon is 15 ml.  
How many dl is the equivalent of 8 tablespoons?

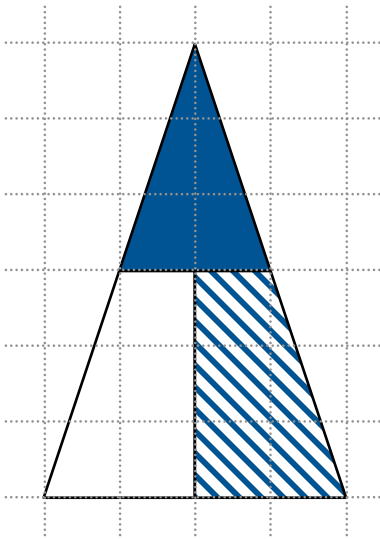
Answer: \_\_\_\_\_ dl (1/0/0)

6. Calculate the value of  $102 - 2x$  if  $x = -10$

Answer: \_\_\_\_\_

(1/0/0)

7. What portion of the total area of the triangle is the striped region?  
Explain your answer, using the figure and the box.



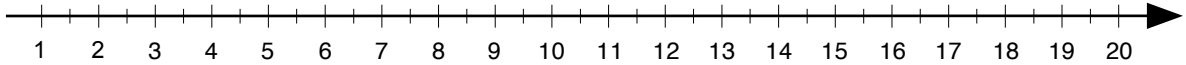
(1/1/0)

8. Solve the equation  $2(4x + 1) = 4(2 - x)$   
Show your solution in the box.

Answer:  $x =$  \_\_\_\_\_

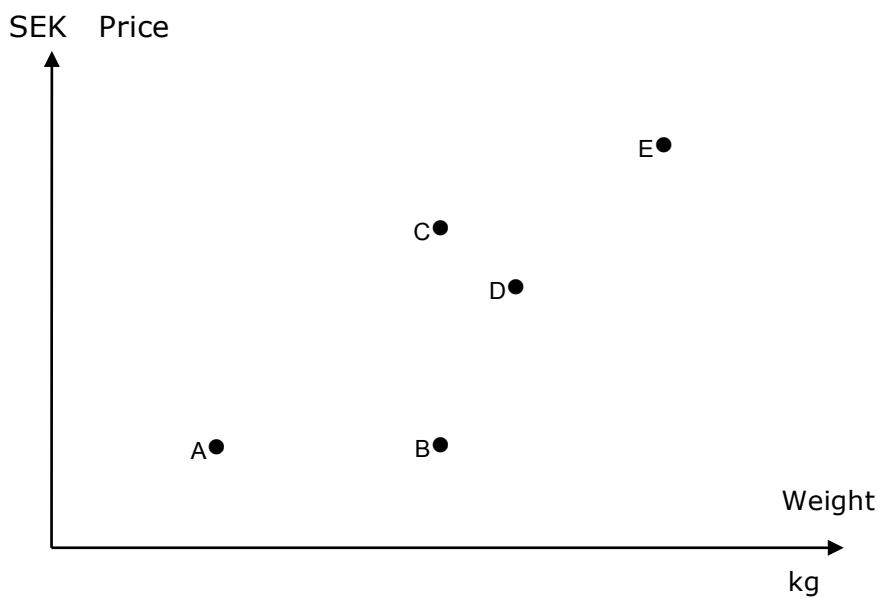
(1/1/0)

9. Mark with an x, the number  $\sqrt{10}$  on the scale below.



(0/1/0)

10. A shop conducted a survey regarding the weight and price of chocolate bars. The result is shown in the following diagram.



a) Which chocolate bars have the same weight?

Answer: \_\_\_\_\_

(1/0/0)

b) Which chocolate bar has the highest price per kilo?  
Show your reasoning in the diagram and the box.

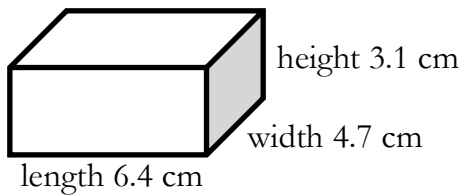
Answer: \_\_\_\_\_

(0/2/1)

11. The limit value of the metal copper in textiles is 25 ppm. How many *per cent* of copper does this value correspond to?

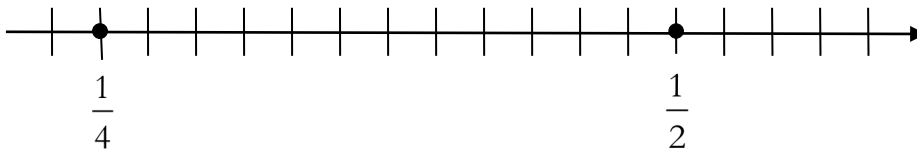
Answer: \_\_\_\_\_% (0/1/0)

12. You are to increase the length, width *or* height of this cuboid by 0.5 cm. Which of the measurements should you change in order for the volume to change as much as possible? The figure is not drawn to scale.



Answer: \_\_\_\_\_ (0/0/1)

13. The numbers  $\frac{1}{4}$  and  $\frac{1}{2}$  are marked on the scale. Mark the number  $\frac{1}{3}$  with an x on the scale. Show your solution in the figure and the box.



(0/1/1)

# Resultatredovisning – Sammanfattning Elev

Nationellt kursprov i matematik, kurs 1a ht 2013

Namn:	Provbetyg:
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	E-poäng		C-poäng		A-poäng		Totalt	
	Din poäng	Max-poäng	Din poäng	Max-poäng	Din poäng	Max-poäng	Din poäng	Max-poäng
<b>Del A – muntlig del</b>		4		4		4		12
<b>Del B</b>		9		7		3		19
<b>Del C</b>		3		5		2		10
<b>Del D</b>		14		15		8		37
<b>Totalt</b>		<b>30</b>		<b>31</b>		<b>17</b>		<b>78</b>

Del A – muntlig del	E	C	A	Poäng	Motivering
Metod och genomförande	+E <sub>B</sub> +E <sub>B</sub>	+C <sub>M</sub>	+A <sub>M</sub>		
Resonemang	+E <sub>R</sub> +E <sub>R</sub>	+C <sub>R</sub> +C <sub>R</sub>	+A <sub>R</sub> +A <sub>R</sub>		
Kommunikation		+C <sub>K</sub>	+A <sub>K</sub>		
<b>Summa</b>	<b>4</b>	<b>4</b>	<b>4</b>		

Del C	E	C	A	Poäng	Motivering
Metod och genomförande	+E <sub>PL</sub> +E <sub>PL</sub>	+C <sub>M</sub> +C <sub>M</sub> +C <sub>P</sub>	+A <sub>M</sub>		
Resonemang	+E <sub>R</sub>				
Kommunikation		+C <sub>K</sub> +C <sub>K</sub>	+A <sub>K</sub>		
<b>Summa</b>	<b>3</b>	<b>5</b>	<b>2</b>		

## Kravgränser

Gräns för provbetyget

E: Minst 21 poäng.

D: Minst 34 poäng varav minst 10 poäng på lägst nivå C.

C: Minst 44 poäng varav minst 19 poäng på lägst nivå C.

B: Minst 54 poäng varav minst 5 poäng på nivå A.

A: Minst 61 poäng varav minst 9 poäng på nivå A.

Kommentarer:
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Blanketten finns att hämta på [www.prim-gruppen.se](http://www.prim-gruppen.se)