

Part B1

The contents of this test paper must remain *confidential* until June 30, 2007.

This part consists of short questions to be solved without a calculator. A correct answer gives 1 g-point (1/0) or 1 vg-point (0/1).

*Time:* 80 minutes for Part B1 and Part B2 together.  
We recommend that you use 30 minutes at the most for working on Part B1. You may not use your calculator and formula sheet until you have handed in Part B1.

Only the answers are required. Write your answer in the spaces provided on this question page.

You can save time by doing mental arithmetic as much as possible.

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

School: \_\_\_\_\_ Class: \_\_\_\_\_

Birth date: Year \_\_\_\_ Month \_\_\_\_ Day \_\_\_\_

Female  Male

1. How much is 10 % of 50 kr? Answer: \_\_\_\_\_ kr (1/0)

2. Write a number in the box so that equality holds.  $0.03 \cdot \boxed{\phantom{000}} = 30$  (1/0)

3. Write a number in the box so that equality holds.  $1.795 - \boxed{\phantom{000}} = 1.705$  (1/0)

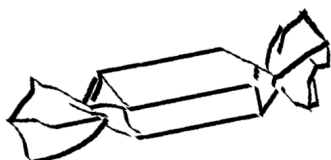
4. Calculate  $7 + 3 \cdot 6$  Answer: \_\_\_\_\_ (1/0)

5. Which of the following numbers is closest to 1? Circle your answer. (1/0)

$\frac{2}{3}$        $\frac{6}{8}$        $\frac{3}{7}$        $\frac{4}{5}$        $\frac{5}{4}$

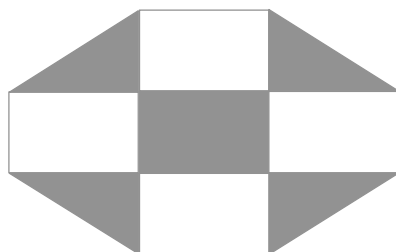
6. Place the numbers **25** and **102** and **0.1** in the boxes so that the result will be as great as possible. 
$$\frac{\boxed{\phantom{000}} - \boxed{\phantom{000}}}{\boxed{\phantom{000}}}$$
 (1/0)

7. There are 5 liquorice toffees, 10 mint toffees and 25 cream toffees in a bag. Find the probability of getting a mint toffee if you take one toffee at random from the bag without looking.



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

8. The figure consists of rectangles and triangles. Each of the rectangles has area  $2 \text{ cm}^2$ .



- a) Find the area of the entire figure.

Answer: \_\_\_\_\_  $\text{cm}^2$  (1/0)

- b) How large part of the figure is grey?

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

9. The table shows a relation between  $x$  and  $y$ . What number is missing in the empty space?

$x$	$y$
1	3
2	5
4	
7	15

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

10. The diagram shows the weight and price for three packages of candy.

- a) Which package costs least?
- b) Put a new point in the diagram which shows a package of candy that weighs less than B, but has the same price per hg as B.

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



(0/1)

11. In Sweden we buy 120 million tulips during the spring season. Write this number in *standard scientific form*.

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

12. What number is *halfway between* -5 and 2?

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

13. For which of the following equations is  $x = -3$  a solution? Circle your answer.

(0/1)

$$x + 2 = 1$$

$$3 - 3x = 6$$

$$\frac{x + 4}{-3} = 4$$

$$5 - x = 8$$

$$\frac{6}{x} = 3$$

14. Calculate  $\sqrt{9+16}$  Answer: \_\_\_\_\_ (0/1)

15. Find the value of  $\frac{a}{b} - b$  if  $a = 12$  and  $b = -4$  Answer: \_\_\_\_\_ (0/1)

16. Simplify as much as possible  $4b - (2a + 3b)$  Answer: \_\_\_\_\_ (0/1)

17. In a bowl with candies there is *only one* yellow one. The probability of getting the yellow one when you take a candy at random from the bowl is 0.05. How many candies are there in the bowl? Answer: \_\_\_\_\_ (0/1)

18. Each side in an equilateral triangle is 5 dm. Find the area of the triangle. One of the alternatives is correct. Circle your answer. (0/1)

6.3 dm<sup>2</sup>      10.8 dm<sup>2</sup>      12.5 dm<sup>2</sup>

15 dm<sup>2</sup>      25 dm<sup>2</sup>