

**MATHEMATICS TEST**  
**Year 9 – Part B1**  
**Spring 2005**

**The contents of this test material  
must remain *secret* until June 30, 2015.**

This part consists of short answer questions to be solved without the calculator. A correct answer gives 1 “Pass” point (g) (1/0) or 1 “Pass-with-distinction” point (vg) (0/1).

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

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

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

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

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

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

Girl ☐ Boy ☐

1. Calculate  $307 - 194$  Answer: \_\_\_\_\_ (1/0)

2. Write seven hundredths as a decimal number. Answer: \_\_\_\_\_ (1/0)

3. Calculate  $2.65 + 0.5$  Answer: \_\_\_\_\_ (1/0)

4. Which bag weighs most? Circle your answer.



(1/0)

5. Find half of  $\frac{1}{4}$ ? Answer: \_\_\_\_\_ (1/0)

6. 

1 tablespoon is 15 ml  
1 teaspoon is 5 ml

How many teaspoons correspond to 4 tablespoons? Answer: \_\_\_\_\_ tsk (1/0)

7. Calculate  $0.02 \cdot 6\ 200$  Answer: \_\_\_\_\_ (1/0)

8. 40 bags of chips weigh 5 kg. You are to calculate how much one bag of chips weighs. Which of these calculations should you do? Circle your answer.

$40 - 5$

$40 \cdot 5$

$40/5$

$5/40$

$40 + 5$

(1/0)

9.  $a = 3$  and  $b = 2$ . Find the value of  $5a - b$ . Answer: \_\_\_\_\_ (1/0)

10. A puppy eats 0.4 kg of dog food every day. A bag of dog food weighs 20 kg. How long will it last? Answer: \_\_\_\_\_ days (1/0)

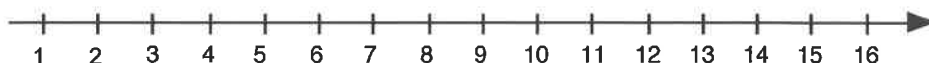
11. Robert's hourly wage is 70 kr. If his wages are increased by 5 %, what will his new hourly wage be? Answer: \_\_\_\_\_ kr (1/0)

12. A car is travelling at an average speed of 90 km/h. How far does the car travel in 20 min? Answer: \_\_\_\_\_ km (1/0)

13. What number is *halfway between*  $-5$  and  $2$ ? Answer: \_\_\_\_\_ (0/1)

14. Make an estimate for  $0.39 \cdot 0.84$  and then circle the best alternative.  
0.033                  0.12                  0.33                  1.2                  3.3 (0/1)

15. Mark  $\sqrt{8}$  on the number line.



(0/1)

16. Philip is going to bake a cake and takes two eggs from the carton with three eggs in it. He does not know that one of the eggs is boiled. Find the probability that he gets the two raw eggs. Answer: \_\_\_\_\_ (0/1)

17. Simplify as much as possible  $\frac{2b+b}{b}$  Answer: \_\_\_\_\_ (0/1)

18. Solve the equation  $0.7(x+7)=7$  Answer:  $x=$  \_\_\_\_\_ (0/1)

19. Which of the following equations has  $x = -3$  as a solution? Circle your answer.

$x+2=1$        $3-3x=6$        $\frac{x+4}{-3}=4$        $5-x=8$        $\frac{6}{x}=3$  (0/1)

20.  $100 \cdot a = \frac{a}{\square}$

What number must be in the box so that the equation will be true for all numbers  $a$ ?

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