

St. Stephen's Girls' College
Mid-Year Examination 2016-2017

Form 1
176 students

MATHEMATICS
Time Allowed : 1 hour

VC, LHK, KAL, CYN

Name: _____ ()

Class: _____ **Division:** _____

Instructions:

1. This paper consists of TWO sections, A and B.
2. Answer ALL questions in the spaces provided in this **Question-Answer Paper**.

For Markers' Use Only	
1 – 23.	(58)
24.	(6)
25.	(4)
26.	(3)
27.	(6)
28.	(6)
29.	(5)
30.	(5)
31.	(7)

Section A (58%)

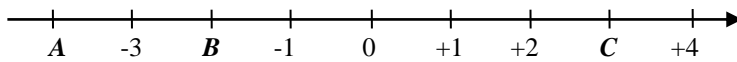
All rough work should be done on the rough work paper provided, but will not be marked.

1. Arrange the following numbers in ascending order.

$$0.05, -0.1, -\frac{1}{3}, \frac{1}{5}, -\frac{1}{2}$$

2. Use index notation to write 216 as a product of prime factors.

3. A, B and C are three points on the number line below



Calculate $A - B - C$.

4. Represent the following word phrase by an algebraic expression:

Subtract x from y , and then multiply the difference by the square of a .

5. Determine whether the following statements are true or false. Circle the correct answer.

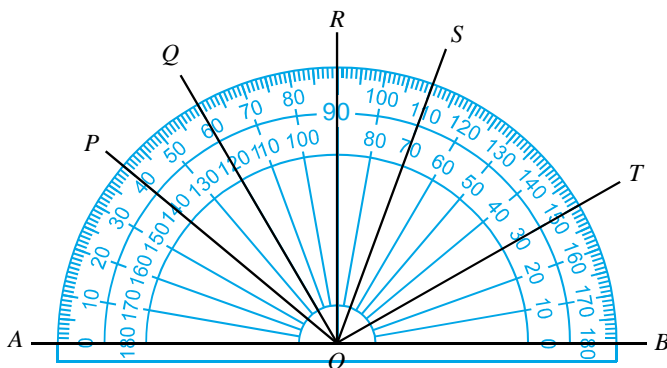
(a) $(-x^2) = (-x)^2$

(b) $a \times a \times a = 3a$

(c) $-2(a - b) = -2a - 2b$

	<u>Answers</u>	<u>Marks</u>
1. _____		3
2. _____		2
3. _____		3
4. _____		3
5.		
(a) True / False		1
(b) True / False		1
(c) True / False		1
Subtotal:	/	14

6. For the algebraic expression $-x + xy \times 3 + 8x + y$, write down
 - (a) the number of terms,
 - (b) a pair of like terms.
7. Solve the following equations:
 - (a) $-3(x + 3) = 15$
 - (b) $4 - \frac{y}{6} = 6$
8. If the sum of three consecutive odd numbers is -27 , find the largest number.
9. There are n students in F.1A. The number of students in F.1B is 2 less than that in F.1A and half of the students in F.1B wear glasses. If there are 18 students in F.1B wearing glasses, find the value of n .
10. Consider the formula $f = 115 + \frac{7}{6}g$. If $f = 80$, find the value of g .
11. It is given that the result of adding the product of 8 and a to 24 is not less than 40. Set up an inequality to represent the above situation.
12. The general term of a sequence is $a_n = \frac{15}{2n}$. Write down the first two terms of the sequence.
13. It is given that y is a function of x , and $y = 21 - 5x$. Find the value of y when $x = -3$.
14. How many right angles are there in 360° ?
15. What type of angle is the sum of two straight angles?
16. In the figure, find the size of $\angle QOS$.



- | | | |
|-----|-------------|---|
| 6. | | 1 |
| (a) | | 1 |
| (b) | | 1 |
| 7. | | 2 |
| (a) | $x =$ _____ | 2 |
| (b) | $y =$ _____ | 2 |
| 8. | | 2 |
| 9. | | 3 |
| 10. | | 3 |
| 11. | | 2 |
| 12. | | 2 |
| 13. | | 2 |
| 14. | | 2 |
| 15. | | 2 |
| 16. | | 2 |

Subtotal:

26
