

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

Date: \_\_\_\_\_

Unit 1&2: Significant figures and Algebra (WA2 Prep)

**WA2 Mock Paper 1**  
**Duration: 40 mins**

**30**

2022 KENT RIDGE SECONDARY SCHOOL S1 WA2 Q4 [2 Marks]

1 Given that  $x = -7$  and  $y = 4$ , find the value of

(a)  $\frac{x}{y} + \frac{y}{x}$

Answer: ..... [1]

(b)  $\frac{xy^2}{5y-4x}$

Answer: ..... [1]

2 (a) Andy calculates the value of an expression and obtains the answer shown below

$$\sqrt[3]{70} \times \sqrt{130} = 460.98988$$

Without using a calculator, determine whether his answer is reasonable using estimation. Show your working clearly.

Answer ..... [2]

(b) By rounding each number to one significant figure, estimate the value of

$$\frac{99.658 \times 34.11}{21.43 \times 2.750}$$

Answer ..... [2]

3

(a) Round 0.999 to 2 significant figures.

Answer ..... [1]

(b) Round 39.87 to 2 significant figures.

Answer ..... [1]

2021 CRESCENT GIRLS' SCHOOL S1 WA2 retest Q2 [2 Marks]

4

According to Department of Statistics, the total population in Singapore in the year 2021 was 5 453 600, corrected to the nearest 100.  
State the largest and the smallest possible number of the Singapore population.

Largest possible number = ..... [1]

Smallest possible number = .....[1]

2024 ASSUMPTION ENGLISH S1 EOY Q8 [2 Marks]

5

For the algebraic expression  $2x - 4y + 3$ ,

(a) State the coefficient of  $x$ ,

*Answer* ..... [1]

(b) The constant term.

*Answer* ..... [1]

2023 CHUNG CHENG HIGH S1 EOY Section B Q1 [2 Marks]

6

Expand and simplify  $2(5p - 3q + 4) - 6(2p - 3)$ .

Answer ..... [2]

2017 ST MARGARET'S SECONDARY S1 MIDYR P1 Q8 [4 Marks] Modified [4 Marks]

7

Simplify the following algebraic expressions.

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

Answer ..... [2]

(b)  $\frac{x}{7} - \frac{5x+1}{3}$

Answer ..... [2]

2021 PIERCE SECONDARY S1 EOY P1 Q6 [2 Marks]

8. Subtract  $2x - 3$  from  $5 - 8x$

Answer ..... [2]

2022 KENT RIDGE SECONDARY S1 WA2 Q10 [3 Marks]

9.

(i) Factorise  $ab + ac$ .

Answer ..... [1]

(ii) **Hence**, compute  $987 \times 68 + 987 \times 32$

Answer ..... [2]

2015 BUKIT MERAH SECONDARY S1 SA1 [2 Marks]

10.

Factorise the following completely.

(a)  $16a + 24ab$

Answer ..... [1]

(b)  $-3x - 9x^2$

Answer ..... [1]

2019 ANDERSON SECONDARY S1 EOY P1 Q7a [2 Marks]

11.

Solve

(a)  $3x + 25 = 2 - (x + 5)$ ,

Answer ..... [2]

2022 KENT RIDGE SECONDARY S1 WA2 Q3 [1 Mark]

12. Write down an algebraic expression for the following.

Express the sum of three consecutive integer if the smallest integer is  $n + 2$

*Answer* ..... [1]