**School Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student Number \_\_\_\_\_\_\_\_\_\_\_**

**The following questions must be done without calculators on an individual basis.**

**1 mark each. (20 marks total per student). No work is required to be shown.**

**Time Limit: 15 minutes**

1. Find 20% of 2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Find 200% of 200 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. 77is 11% of what number? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Evaluate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. What is the remainder when 913 624 is divided by 5? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
6. Find the slope of the line \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
7. Find the slope of the line 3x – 5y + 7 = 0 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
8. Expand and simplify (4*x* + 3)(4*x* – 3) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
9. Expand and simplify \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
10. State the coordinates of the vertex of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
11. State the coordinates of the vertex of **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
12. Simplify (as a single power) . \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
13. Write as a single power with a positive exponent \_\_\_\_\_\_\_\_\_\_\_\_
14. Evaluate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

15.) Find the sum of the first 101 terms of the sequence 3, -3, 3, -3, …

1. Find the area of the rectangle with width = 5 cm and diagonal = 13 cm. \_\_\_\_\_\_\_\_\_\_\_
2. If *x*:9: 7 = 12:27 : *y* find the sum of*x*and *y*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. Factor fully:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

19.) The volume of a cube is 343 cm3. What is the area of one face of the cube? \_\_\_\_\_\_\_

20.) Simplify.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Marking Scheme**

**1 mark each. (20 marks total per student)No work is required to be shown.**

**The Team Total is the Best Five Students Totals For Each Team, Divided by 2.**

1. Find 20% of 2 0.4
2. Find 200% of 200 400
3. 77 is 11% of what number? 700
4. Evaluate 60
5. What is the remainder when 913 624 is divided by 5? The remainder is 4.
6. Find the slope of the line
7. Find the slope of the line 3x – 5y + 7 = 0
8. Expand and simplify (4*x* + 3)(4*x* – 3)
9. Expand and simplify
10. State the coordinates of the vertex of
11. State the coordinates of the vertex of
12. Simplify (as a single power) .
13. Write as a single power with a positive exponent
14. Evaluate 27

15. Find the sum of the first 101 terms of the sequence 3, -3, 3, -3, … 3

16. Find the area of the rectangle with width = 5 cm and diagonal = 13 cm. 60 cm2

17. If *x* : 9: 7 = 12 : 27 : *y* find the sum of *x* and *y* 25

18. Factor fully:

19. The volume of a cube is 343 cm3. What is the area of one face of the cube? 49 cm2

20. Simplify. or