**Course \_\_11 METHODS\_\_\_\_\_\_ Year \_\_\_11\_\_\_\_\_\_**

Student name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Teacher name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Task type: Test 1 Weds week 2 2021**

**Time allowed for this task: \_\_\_\_\_\_40\_\_\_\_\_ mins**

**Number of questions: \_\_\_\_\_\_\_\_\_\_\_**

**Materials required:** No calculators nor classpads

Standard items: Pens (blue/black preferred), pencils (including coloured), sharpener, correction fluid/tape, eraser, ruler, highlighters

Special items: Drawing instruments, templates (No notes allowed)

**Marks available: 42\_ marks & 7 questions**

**Task weighting: 10\_%**

**Formula sheet provided: No**

**Note: All part questions worth more than 2 marks require working to obtain full marks.**

Q1 (1, 1, 2, 3, 3, 3 & 4 = 17 marks) (1.1.6)

Solve the following linear equations showing full working.

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Q2 (2 & 2 = 4 marks) (1.1.6)

$1200 is divided between three students A,B & C. Student A receives one third the amount that student B receives and student C receives twice the amount of student A. Let  equal the amount that student B receives.

1. Write the above as a linear equation in terms of .
2. Solve for and hence state the amount that each student receives.

Q3 (2 & 2 = 4 marks) (1.1.6)

Three consecutive even numbers add up to 366.

1. By introducing a variable , express the above statement as a linear equation for .
2. Solve for and hence state the three even numbers.

Q4 (4 marks) (1.1.6)

A woman travels at 10 km/h from A to B and from B to A at 4 km/h. The total journey takes 90 minutes.

Determine the distance travelled.

Q5 (3 & 3 = 6 marks) (1.1.6)

Solve the following.

|  |  |
| --- | --- |
| a) | b) |

Q6 (4 marks) (1.1.6)

Hilary thinks of a two-digit number. The sum of the digits is 14. If she reverses the digits, the new number is 18 less than her original number. Solve for Hilary’s original number **using** simultaneous equations.

Q7 ( 3 marks) (1.1.6)

Solve for  in terms of the constants  for the following. (simplify)

