INTERHOUSE MATHEMATICS TEAM

CHALLENGE 2023

# YEARS 7-8 TEAM EVENT Time: 30 minutes

**(*Calculators are allowed)* Total: 100 points\_**

***Please write answers on the answer sheet.***

**T1. (10 points)**

Patrons attending a music festival were charged $9 on entry. The total on the receipt was $1012A7. (The digit where the A is was unreadable). How many people attended the festival?

**T2. (20 points)**

One clock gains1 minute every hour while another clock loses 1 minute every hour. If both clocks show two o’clock, in how many hours will both clocks again show the identical time?



**T3. (20 points)**

How many different paths can be traced from point *X* to point *Y* if the movement must be to the right or down.

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**T4. (10 points)**

What is the speed (in km/h) of a river current if a rower can row downstream at 12 km/h and upstream at 4 km/h?

**T5. (20 points)**

Five consecutive integers have a product of 6236553960. What is largest of the 5 integers?

**T6. (20 points)**

Caitlin and Nathan go to the Cinema with 3 friends where they all sit in a row of 5 seats. How many seating arrangements are possible if Caitlin and Nathan wish to sit next to each other?

### **2023 INTERHOUSE MATHS TEAM CHALLENGE**

#### **YEARS 7-8 TEAM EVENT**

RESPONSE SHEET

|  |  |  |
| --- | --- | --- |
| Question | Answers | Points |
| **T1.** (10 points) |  |  |
| **T2.** (20 points) |  |  |
| **T3.** (20 points) |  |  |
| **T4.** (10 points) |  |  |
| **T5.** (20 points) | \_\_\_\_ |  |
| **T6.** (20 points) |  |  |

|  |  |
| --- | --- |
| House | Total Score |

### **2023 INTERHOUSE MATHS TEAM CHALLENGE**

#### **JUNIOR (Year 7 & 8)**

TEAM EVENT

**ANSWER SHEET**

|  |  |  |
| --- | --- | --- |
| Question | Answers | Points |
| **T1.** (10 points) | 11253 |  |
| **T2.** (20 points) | 360 |  |
| **T3.** (20 points) | 216 |  |
| **T4.** (10 points) | 4 km/h |  |
| **T5.** (20 points) | 93 |  |
| **T6.** (20 points) | 48 |  |