

$$|50 - 10|$$

randomly throwing two fair 6-sided dice (the faces of each die are labeled with the values 1, 2, 3,

mean of the first three common terms of these sequences.

4. Let  $y = mx + b$  be the equation of a line that contains  $(2, 18)$  and is perpendicular to the line whose

some order form an arithmetic sequence. Express your answer as an improper fraction reduced to

$$m^2 + 4m + 4$$

Names: \_\_\_\_\_

Team Code: \_\_\_\_\_

2015 John O'Bryan Mathematical Competition  
Two-Person Speed Event

SCORE

Calculators are not allowed to be

2<sup>20</sup>: 6 points  
All Others: 3 points

There is another minute time limit.

only one answer each round. To

7.

T2.

Note: All answers must be written legibly and in simple form. Exact answers are to be given unless



scores.



on each round. You may submit



3860

3c

8. \_\_\_\_\_ 50

T1. \_\_\_\_\_ 43

T2. \_\_\_\_\_ 535