



## Math 10 is having Target Practice!

### Required:

- ✓ 2 teams of 2
- ✓ Differently colored dice
- ✓ Graph paper (or a copy of this page)
- ✓ Pencil, eraser & ruler

### Directions:

- Teams will alternate turns.
- In the first round, the first team will roll their pair of dice to determine a set of “target points”. The “target points” correspond to coordinate points, which they will plot on their graph paper. The second team will do the same.
- Each team will then need to determine a possible linear equation that will include that point.
- This process will be repeated. However, on each round, the teams will need to roll the same number of targets as the round number. For example, on round 3, they will need to have 3 targets.
- This process must be repeated for at least 5 rounds.

### Scoring:

For each target included in the equation that is created (in each round), you get the same number of points as the round. For example, if you hit 2 targets in round 3, you get  $2 \times 3 = 6$  points. But if you can get all 3 targets on the line, you get  $3 \times 3 = 9$  points.

### Variations:

To make the game more challenging:

- try assigning one die to be a positive integer with the other die being a negative integer
- try including the origin as an extra target in each round
- try placing restrictions on the points that can be used (e.g. using targets that are at least 2 units apart or no repeating digits in the targets)

