## Beam Me Up

The year is 2421. Society has changed. Civilizations have risen and fallen. Technology has progressed and humans have evolved, yet the beauty of Math will always be constant. So much so that 400 years from now students will still be going to their grade 10 Science option Math class. However, instead of taking school buses, students go to school on spaceships and teleport directly to their classes.

You wake up one morning on your spaceship and need to teleport to Math class however you have 4 different teleporters to choose from. Each one has been calibrated differently according to the following info:

Teleporter A:

- Trajectory modeled on a seconddegree function
- Positive over the interval  $\left[-2,13\right]$
- f(6) = 8

Teleporter B:

- Trajectory is parabolic
- Axis of symmetry: x = 6
- Range:  $-\infty, 4$ ]
- Initial value of 2

Teleporter C:

• Trajectory modeled on the rule:

 $\frac{3x}{14} - \frac{11y}{14} = 1$ 

Teleporter D:

• Trajectory is modeled on a quadratic function and based on the following table of values

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-15	16
3	-4
21	16
30	41

The teleporters work by converting mass into energy but need an <u>unobstructed</u> path to work. Two planets located at  $P_1(-1,2)$  and  $P_2(1,-1)$  lie in between your spaceship and your Math class.

## Knowing that you must teleport to the exact coordinates of your Math class, which of the four teleporters could you use?

## Your solution:

