



MATHS AT O'BRIEN GROUP ARENA

Grades 7 & 8

As a hockey player, it is important to be able to score goals on the net and help your teammates getting goals, too! Points are given to players to track how valuable they are to a team throughout the season.

Two points are gained by scoring on a goal yourself, one point is given when you assist a teammate in getting a goal, and two points taken away when the opposition scores against you.

Competing with a friend, see who can get the most points to win the Stanley Cup!

To play the game:

- Get a set of **three dice** and roll them **all together**
- You get 5 rolls each round
- If the sum of the dice is between or including 3 and 10, opposition scored against you while you were on the ice! **Take away two points**
- If the sum of the dice is between or including 11 - 18, a team mate scored a goal with your assistance! **Give yourself +1 point**
- When you land a double or triple, you have scored a goal! **Add +2 points to your score**
- Jot down how many points you get throughout the round then add them up,
- The player with the highest amount of points wins!

Example:

Amy rolls 2,3,6 ~ 4,3,2 ~ 5,5,1 ~ 1,2,3 ~ 6,4,3 = 11 ~ 9 ~ Doubles ~ 6 ~ 13

	Points awarded / lost					TOTAL
Example:	+1	-1	+2	-1	+1	+2
Round 1						
Semi Final						
Grand Final						
					TOTAL:	

Numbers: Integers



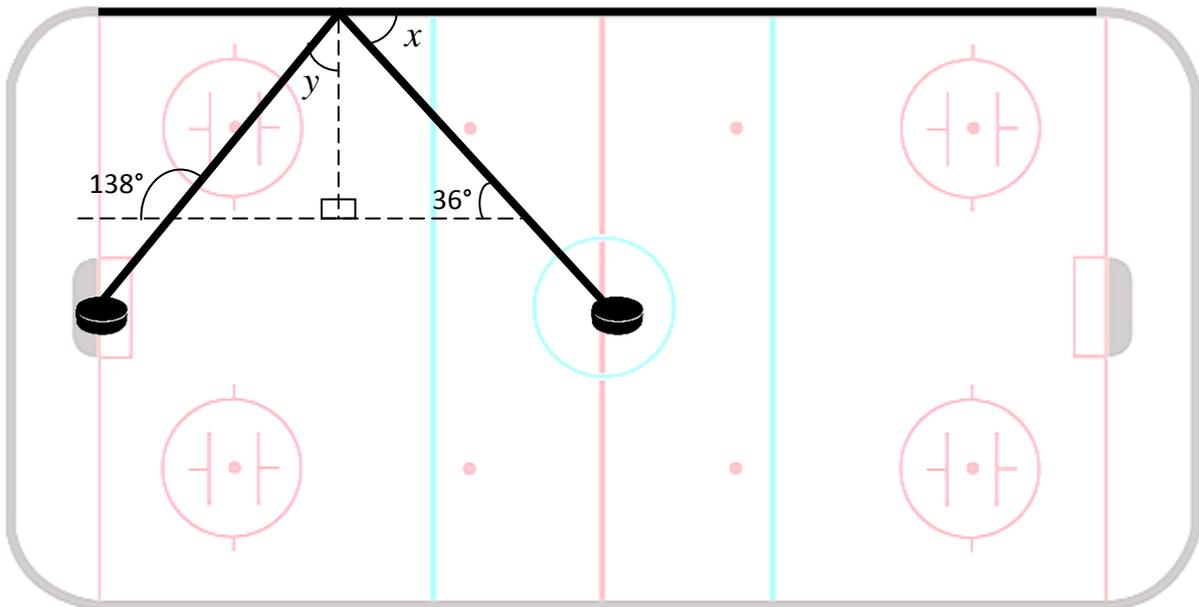
O'BRIEN GROUP ARENA

Jared is practicing scoring goals using angles off the boards.

1. Calculate the angle at which the puck hits the boards and goes into the net (x).



2. Using this answer and the other angles given, calculate angle y .





O'BRIEN GROUP ARENA

In preparation for your visit at the O'Brien Group Arena, use this table to tally your classmates' shoe sizes!

Shoe Size	Tally Marks	Total
Example	IIII	4
4		
5		
6		
7		
8		
9		
10		
11 +		

On the axis below, plot this data as a dot plot. *Be sure to label each axis appropriately!*





Using the data you've collected, calculate:

a. The Mode

b. The Mean

c. The Median

d. The Range



O'BRIEN GROUP ARENA

During an AHL match, there are 983 seats in the O'Brien Group Arena grandstand.

If 63 of these are reserved for VIP and 189 seats have been pre-purchased

1. Write an equation to solve for x , where x is the amount of remaining seats in the grandstands

2. Solve the equation

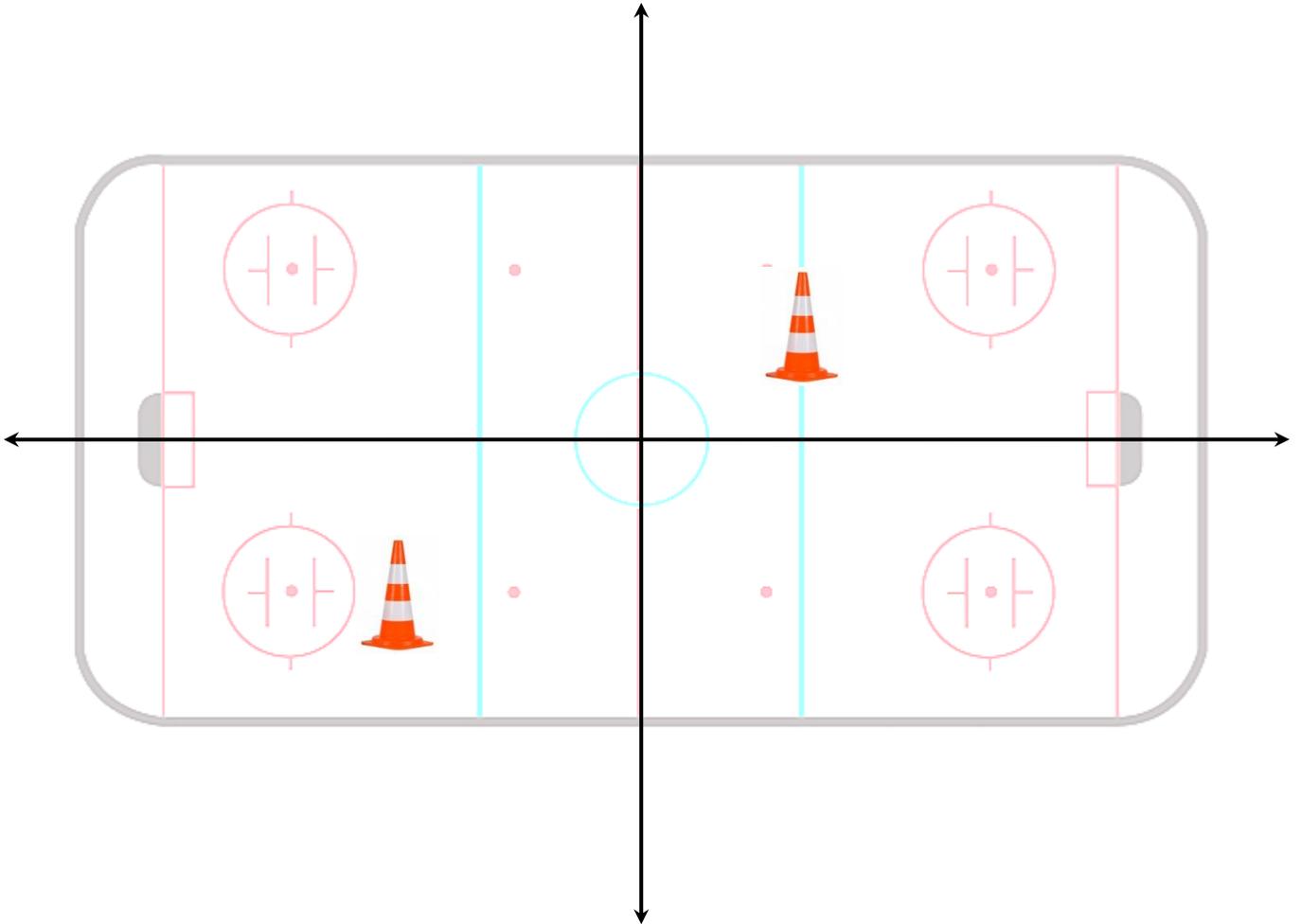
3. If $x = 946$, calculate the new total of grand stand seats





O'BRIEN GROUP ARENA

1. Label the x and y axis on the Cartesian plane
2. Add a number scale from -10 to 10 on both x and y axis



3. As a drill, hockey skaters are required to skate around these cones in a figure 8 pattern, passing through $(0,0)$ twice. Draw this pattern on the graph and write down four more points the skater will skate through.



O'BRIEN GROUP ARENA

There are 40 lights above each rink. Each light omits 1,000 watts of energy per hour.

1. How much energy does it take to run all of them for one hour?



2. To run all the lights costs \$38.00 per hour. How much would it cost to run three quarters of the lights for 3 hours?

3. The cost for a concession to skate is \$24.00. Use your answer from question 2 to help find out how many concession skaters would need to come in in order to cover the cost of running $\frac{3}{4}$ of the lights for three hours.
Give your answer as a fraction *and* as a whole number rounded up to the next one