"Here Comes Santa Claus"



RAINBOW GROUP DIRECTIONS:

- 1. Compare highest points of each of the four throws. If the object of the competition is to get the highest throw, who wins?
- 2. Compare the amounts of time it takes for each sleigh to hit the ground. If the object of the contest is to hit the ground first, who wins?
- 3. Dasher is another reindeer in the competition. He is standing at the same spot as the other reindeer. Describe Dasher's throw in words, make a table of values, make a graph and write an equation for Dasher's throw. Make Dasher win one of the competitions mentioned in #1 and #2)!



Here Comes Santa Claus

Comet launched his Santa sleigh and it fell as shown on the following graph.

The graph describes the height of the object at different times.



COLOR GROUP DIRECTIONS:

Analyze the information presented and draw some conclusions.

- 1. From what height does Comet throw his sleigh?
- **2.** How high is the sleigh after one second?
- **3.** What is the maximum height that the sleigh reaches? Show or explain how you arrived at your answer.
- **4.** When will the sleigh hit the ground? Show or explain how you arrived at your answer.
- **5.** Write an equation for the height of the sleigh as a function of time. Show or explain how you arrived at your answer.

Here Comes Santa Claus

Prancer launched his Santa sleigh and it fell as shown on the following table.

The table describes the height of the object at different times.

Time	0	0.5	1	1.5	2	2.5
height	50	61	64	59	46	25

COLOR GROUP DIRECTIONS:

Analyze the information presented and draw some conclusions.

- 1. From what height does Prancer throw his sleigh?
- 2. How high is the sleigh after one second?
- 3. What is the maximum height that the sleigh reaches? Show or explain how you arrived at your answer.
- 4. When will the sleigh hit the ground? Show or explain how you arrived at your answer.
- 5. Write an equation for the height of the sleigh as a function of time. Show or explain how you arrived at your answer.

Here Come's Santa Claus

Vixen launched his Santa sleigh and it fell according to the equation $h = -16t^2 + 25t + 50$



The equation describes the height of the object at different times.

COLOR GROUP DIRECTIONS:

Analyze the information presented and draw some conclusions.

- 1. From what height does Vixen throw his sleigh?
- 2. How high is the sleigh after one second?
- **3.** What is the maximum height that the sleigh reaches? Show or explain how you arrived at your answer.
- **4.** When will the sleigh hit the ground? Show or explain how you arrived at your answer.
- **5.** Write an equation for the height of the sleigh as a function of time. Show or explain how you arrived at your answer.

Here Come's Santa Claus

Rudolph launched his Santa sleigh with initial velocity 40 feet/second from an initial height of 50 feet.

COLOR GROUP DIRECTIONS:

Analyze the information presented and draw some conclusions. You must write an equation to help you.

- 1. From what height does Rudolph throw his sleigh?
- 2. How high is the sleigh after one second?
- **3.** What is the maximum height that the sleigh reaches? Show or explain how you arrived at your answer.
- **4.** When will the sleigh hit the ground? Show or explain how you arrived at your answer.
- **5.** Write an equation for the height of the sleigh as a function of time. Show or explain how you arrived at your answer.