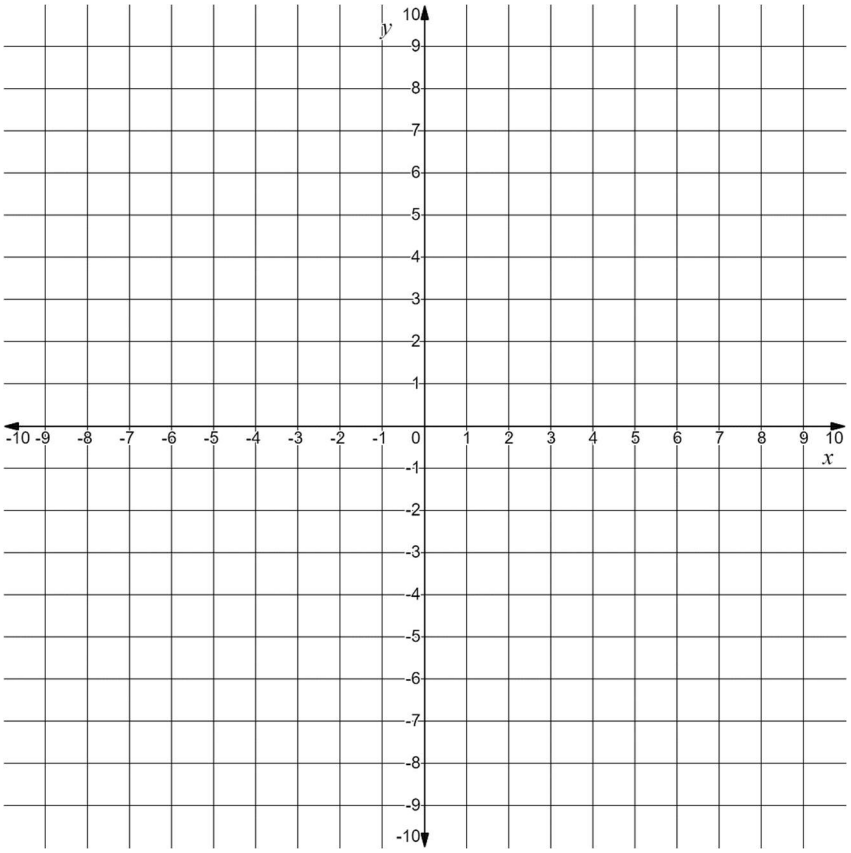
Name: _____ Date: _____

Learning Goal 9.2	Solving quadratic inequalities.

Example You can use a parabolic reflector to focus sound, light, or radio waves to a single point. A parabolic microphone is used by journalists to direct incoming sounds. If the reflector has a width of 50 cm and a maximum depth of 15 cm, describe the region that the microphone can cover.



Example A bus company currently charges a fare of $\$50$ on one of its routes and averages 45 passengers per trip. If is estimated that for every $\$2$ increase in the price, one fewer passenger will take the bus. Write an inequality that models the revenue for this situation. What fare would produce revenues that exceed $\$2\ 000$? Use a graph to show your work.