



| Year | Ontario's CO ₂ Emissions (kilotonnes/year) |
|------|--|
| 1995 | 175 000 |
| 1996 | 182 000 |
| 1997 | 186 000 |
| 1998 | 187 000 |
| 1999 | 191 000 |
| 2000 | 201 000 |
| 2001 | 193 000 |
| 2002 | 199 000 |
| 2003 | 203 000 |
| 2004 | 199 000 |
| 2005 | 201 000 |

CO₂ emissions are measured in kilotonnes (kt); 1 kt = 1000 tonnes (t) and 1 t = 1000 kg.

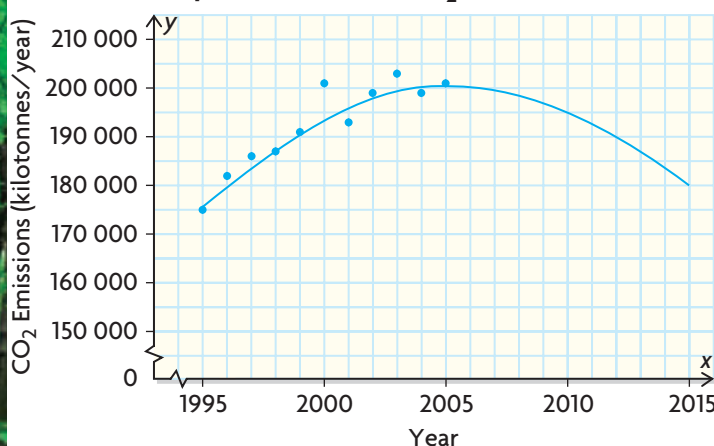
Quadratic Equations

▶ GOALS

You will be able to

- Solve quadratic equations graphically, by factoring, and by using the quadratic formula
- Write a quadratic relation in vertex form by completing the square
- Solve and model problems involving quadratic relations in standard, factored, and vertex forms

Optimistic Model of CO₂ Emissions in Ontario



? Recent attention to the environment has raised awareness about the effects of carbon dioxide in the atmosphere. Many countries are developing strategies to reduce their CO₂ emissions.

How can you use a quadratic model to predict when Ontario's CO₂ emissions might drop below 1995 levels?