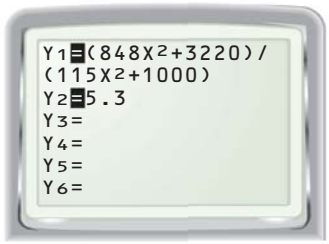
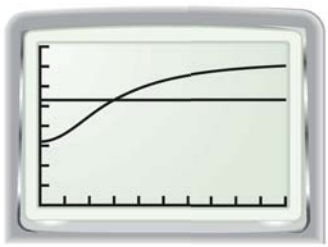
METHOD 2

Using a Graph You can also use a graph to solve $5.3 = \frac{848t^2 + 3220}{115t^2 + 1000}$.

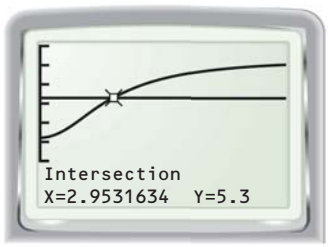
STEP 1 **Enter** the functions $y = \frac{848x^2 + 3220}{115x^2 + 1000}$ and $y = 5.3$ into a graphing calculator.



STEP 2 **Graph** the functions. Adjust the viewing window so that it shows the point in the first quadrant where the graphs intersect.



STEP 3 **Find** the intersection point of the graphs using the calculator's *intersect* feature. The graphs intersect at about (3.0, 5.3).



▶ Total sales of entertainment software were about \$5.3 billion 3 years after 1995, or in the year 1998.

PRACTICE

RATIONAL EQUATIONS **Solve the equation using a table and using a graph.**

1. $\frac{80x^2 + 300}{15x^2 + 200} = 4.2$

2. $\frac{5x + 5}{x^2 + 4} = 2$

3. $\frac{9x + 2}{x - 5} = 20.75$

4. $\frac{6x^2}{2x - 3} = 18$

5. $\frac{14x^2 + 60}{5x^2 + 7} = 3.5$

6. **WHAT IF?** In the problem on page 596, suppose you want to find the year when total sales of entertainment software were \$4.5 billion. Find this year using a table and using a graph.

7. **DIVING** The recommended percent p of oxygen (by volume) in the air that a diver breathes is given by $p = \frac{660}{d + 33}$ where d is the depth (in feet) of the diver.
   - **a.** At what depth is air containing 5% oxygen recommended? Use a table to find the answer.
   - **b.** At what depth is air containing 10% oxygen recommended? Use a graph to find the answer.