Solve each system of equations by graphing. Sketch the graphs and use your "Intersect" button on your calculator.
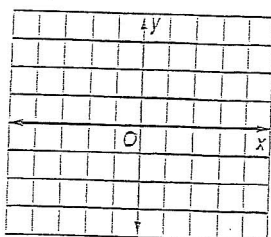
1. $x - 2y = 0$
   $y = 2x - 3$
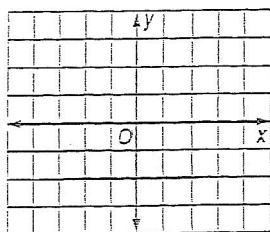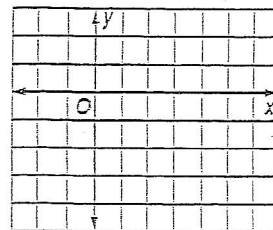
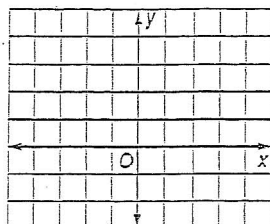2. $x + 2y = 4$
   $2x - 3y = 1$

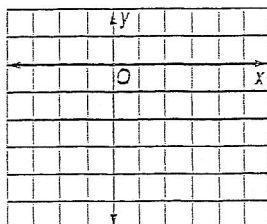3. $2x + y = 3$
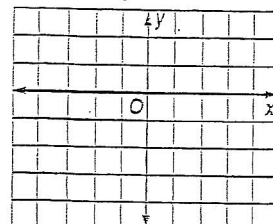 $y = \frac{1}{2}x - \frac{9}{2}$

4. $y - x = 3$
 $y = 1$

5. $2x - y = 6$
   $x + 2y = -2$

6. $5x - y = 4$
   $-2x + 6y = 4$

Hurricane High School needs new software. Software A costs $13,000 plus $500 per additional site license. Software B cost $2500 plus $1200 per additional site license.

7. Write two equations that represent the cost of each software option.

8. Graph the equations. Estimate the break-even point of the software costs.

Software Costs

(Total Cost ($) vs Additional Licenses graph, y-axis: 4,000 to 24,000; x-axis: 0 to 20)
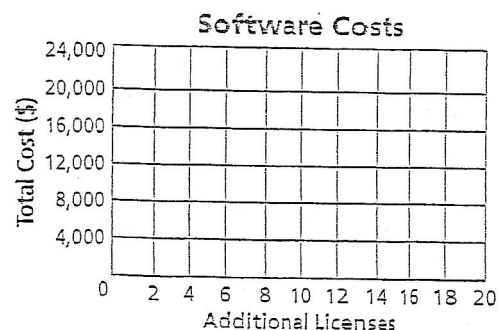
9. If Hurricane High plans to buy 10 site licenses, which software will cost less?