VOCABULARY

1. Fill in the Blank When graphing a system of two equations, the solution(s) of the system is/are the _____________________________ of the graphs.

PROPERTIES Objective D

2. True or False The two equations in a system represent a line $y = mx + b$ and a parabola $y = kx^2$. The system can have
   a. more than one solution. ____________ b. zero solutions. ____________

USES Objective F

3. Tonya’s T-Shirts and Sari’s Silk Screening each print custom t-shirts. Tonya charges $4.50 per t-shirt plus a $300 set-up fee. Sari charges $6.50 per t-shirt, plus a $100 set-up fee.
   a. For how many t-shirts would the two charge the same? _________________
   b. What would the charge be for the number of t-shirts from Part a? _________________
   c. For how many t-shirts would Tonya’s shop be cheaper? _________________

REPRESENTATIONS Objective I

In 4 and 5, a. sketch a graph of the system and b. estimate any intersection point to the nearest tenth.

4. \[
\begin{align*}
  y &= \frac{3}{2}x + 1 \\
  y &= x^2
\end{align*}
\]
   a. 
   b. _________________

5. \[
\begin{align*}
  y &= \frac{10}{x} \\
  2x - 3y &= 18
\end{align*}
\]
   a. 
   b. _________________