****

**8-58.** Graph *y* = *x*2 − 8*x* + 7 and label its vertex, *x*-intercepts, and *y*-intercepts.



**8-60.** Based on the tables below, say as much as you can about the *x*- and *y*-intercepts of the corresponding graphs.

a.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| x | 2 | 0 | -4 | -1 | 6 | 3 |
| y | 0 | 18 | 0 | -8 | 22 | 0 |

b.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| x | 7 | 3 | 10 | 0 | 8 | -7 |
| y | -4 | 0 | 8 | -3 | 0 | -1 |

c.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| x | 0 | -5 | 3 | 1 | 13 | -6 |
| y | -4 | 11 | -2 | 0 | 27 | 14 |

**8-62.** Solve the following systems of equations using any method. Check your solution if possible.

1. 6*x* − 2*y* = 10 b. *x* − 3*y* = 1
*y* = 16 − 2*x* 3*x − y* = 2

**8-61.** In speed golfing an athlete’s score is determined by adding the number of strokes to complete a course to the minutes required to finish.  For example 90 strokes in 51 minutes would be a score of 141.  The lower the score, the better.  Diego wants to see if there is a relationship between the time, *t*, it takes for him to complete a speed golfing match and the number of strokes, *s*, he takes in the same match.  If so, perhaps focusing on running faster will also reduce the number of strokes.



* 1. Create a scatterplot with pencil and paper.  Determine Diego’s best score and circle the point representing Diego’s best total score.
	2. Write what you can about the association from observation of the scatterplot.
	3. Diego recalls that he was suffering from seasonal allergies that slowed his running on a particular course.  Cross-out that point.  Then use your intuition and draw a line of best fit from the remaining points.
	4. Estimate the slope of your trend line and interpret it in the context of the problem.
	5. Should Diego train to reduce his time so that he sees an increase in his golf score?