

7-59. See below:

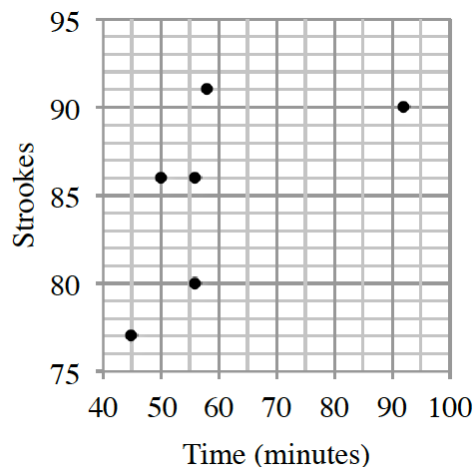
- $\triangle CED$; ASA \cong
- $\triangle EFG$; AAS \cong
- Not necessarily \cong , the congruent sides are not corresponding.
- Not necessarily \cong , AAA is not a congruence condition.

7-60. See below:

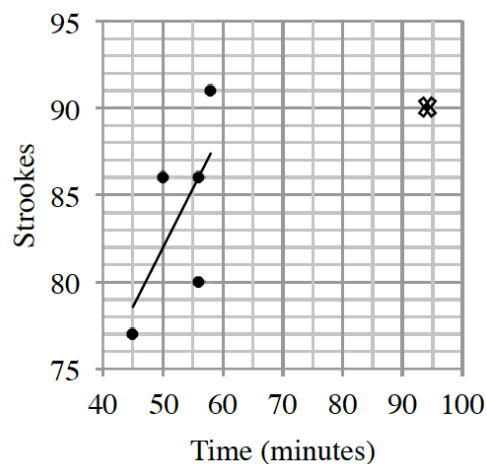
- $(-1, -7)$
- $(\frac{1}{2}, 2)$

7-61. 0.87**7-62. See below:**

- See scatterplot below. Best score is 45 minutes + 77 strokes = 122 points.



- There is a weak to moderate positive linear association between Diego's run time and the strokes taken for each match. There looks to be an outlier at 92 minutes.
- See graph below.



- d. $m \approx 0.7$; Every minute of increase in time is predicted to increase the number of strokes by about 0.7.
- e. The variables are moderately associated, but that does not mean that one variable causes the other. It does seem reasonable that training for conditioning could improve Diego's aim and confidence in his golf swing, however the potential exists that a better more accurate swing could also reduce the amount of running required on the course. It is not clear what causes what, or if there is a third, lurking, variable.

7-63. See below:

a. $W = \frac{V}{LH}$

b. $x = 2(y - 3)$

c. $R = \frac{E}{I}$

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

7-64. $d = (8 + 2)(t - 1)$ and $d = (8 - 2)(t)$, where d = one-way distance of trip (miles) and t = time to travel upstream (hours); 30 total miles.