

Sections 1.6 to 1.7 Review

- 1) The table to the right shows the number of degrees given at a private university in 1996 and in 2006.
- Create a scatter plot for the data.
 - Draw in the line $y = x$. Make sure that it is fairly accurate.
 - Explain what the line $y = x$ represents in this problem.
 - Each dot represents what “thing”?
 - Every dot in the scatter plot is on one side of the line $y = x$ except for one. Why is this so?

Degree	1994	2004
Architecture	76	78
Biological Sciences	158	172
Business and Management	410	422
Computer Science	132	205
Cultural Studies	25	46
Education	247	261
Engineering	351	370
English Literature	129	143
Law	18	29
Mathematics	62	65
Philosophy	43	52
Physical Sciences	107	110
Visual and Performing Arts	154	141

- 2) Identify the location (axis or quadrant) of each point listed.
- $(-4,0)$
 - $(3,-1)$
 - $(0,0)$
 - $(6,-3)$
 - Both coordinates are negative
 - Both coordinates are positive
 - First coordinate is zero, the second is zero.

- 3) This table shows the Forbes ranking of the top ten places in the United States for business in 2004 compared with their ranking in 2003.

- Draw the line $y = x$ on the diagram below.
- Which places are below the $y = x$ line? What does this mean?
- Which places are above the $y = x$ line? What does this mean?
- According to Forbes, which place showed the greatest improvement in its business climate between 2003 and 2004? How can you tell?

