**Representing Relations II**

A *relation* is a connection between an input and an output. The following table gives the top-rated NFL quarterbacks in terms of the percentage (PCT) of their completed passes (as of 11/13/10). The measures used to find the percentages are passes attempted (ATT) and passes completed (COMP). Use the data to express the relations in a variousl ways.

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| **NFL Quarterback Passing Statistics - 2010**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | PLAYER | TEAM | [ATT](http://espn.go.com/nfl/statistics/player/_/stat/passing/sort/passingAttempts) | [COMP](http://espn.go.com/nfl/statistics/player/_/stat/passing/sort/completions) | PCT | | [Drew](http://espn.go.com/nfl/players/profile?playerId=2549) Brees | Saints | 374 | 261 | 70 | | [Tony Romo](http://espn.go.com/nfl/players/profile?playerId=5209) | Cowboys | 213 | 148 | 70 | | [David Garrard](http://espn.go.com/nfl/players/profile?playerId=3636) | Jaguars | 149 | 101 | 68 | | [Eli Manning](http://espn.go.com/nfl/players/profile?playerId=5526) | Giants | 271 | 178 | 66 | | [Philip Rivers](http://espn.go.com/nfl/players/profile?playerId=5529) | Chargers | 329 | 215 | 65 | | [Peyton Manning](http://espn.go.com/nfl/players/profile?playerId=1428) | Colts | 350 | 228 | 65 | | Matt Schaub | Texans | 267 | 170 | 64 | | [Tom Brady](http://espn.go.com/nfl/players/profile?playerId=2330) | Patriots | 261 | 166 | 64 |   <http://espn.go.com/nfl/statistics/player/_/stat/passing/sort/completionPct> | | 1. **Mapping Diagram**   Player PCT   |  |  |  | | --- | --- | --- | | D. Brees  T. Romo  D. Garrard  E. Manning  P. Rivers  P. Manning  M. Schaub  T. Brady |  | 70  68  66  65  64 | |  | |  | |  | |  | |  | |
| 1. **Ordered Pairs** (Player, PCT Passes Complete)   ( \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_ )  ( \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_ )  ( \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_ )  ( \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_ )  ( \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_ )  ( \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_ )  ( \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_ )  ( \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_ ) | 1. **Graph** (Attempted passes, Completed passes)   **C:\Users\TRAVEL\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\BAUHNN9G\foot.png** | |

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| 1. Map the gender of your teachers to the subject they teach.   **Gender Subject**   |  |  |  | | --- | --- | --- | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | 1. Map the subjects of your classes to the gender of the teacher.   **Subject Gender**   |  |  |  | | --- | --- | --- | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |
| 1. Make a table for each relation. You may need to look things up in an atlas, an almanac, or online. | | |
| |  |  | | --- | --- | | **State** | **Capital City** | | Connecticut |  | | Massachusetts |  | | Rhode Island |  | | Maine |  | | New Hampshire |  | | Vermont |  | | |  |  | | --- | --- | | **State** | **Ocean it Borders** | | Maine |  | | Oregon |  | | Virginia |  | | Florida |  | | Washington |  | | California |  | | |
| 1. List ordered pairs with famous actors as the inputs, and the movies they were in as the outputs.   ( \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ )  ( \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ )  ( \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ) | | |
| 1. List the ordered pairs (*x*, *y*) that are plotted on the graph to the right.   A ( \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_ ) B ( \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_ )  C ( \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_ ) D ( \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_ )  E ( \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_ ) F ( \_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_ )   1. Which of the relations in 1–8 are functions? Which are not? Explain. | | **C:\Users\TRAVEL\AppData\Local\Microsoft\Windows\Temporary Internet Files\Content.IE5\XR0RSD3R\cartesian.png** |