**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**

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| 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

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| --- | --- | --- |
| D. BreesT. RomoD. GarrardE. ManningP. RiversP. ManningM. SchaubT. Brady |  | 7068666564 |
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| 1. **Ordered Pairs** (Player, PCT Passes Complete)

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| 1. Map the gender of your teachers to the subject they teach.

 **Gender Subject**

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 | 1. Map the subjects of your classes to the gender of the teacher.

 **Subject Gender**

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| 1. Make a table for each relation. You may need to look things up in an atlas, an almanac, or online.
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| --- | --- |
| **State** | **Capital City** |
| Connecticut |  |
| Massachusetts |  |
| Rhode Island |  |
| Maine |  |
| New Hampshire |  |
| Vermont |  |

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|  |  |
| --- | --- |
| **State** | **Ocean it Borders** |
| Maine |  |
| Oregon |  |
| Virginia |  |
| Florida |  |
| Washington |  |
| California |  |

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| 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.
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