1.  The coordinator for the Student Support Program administered a standardized, norm-referenced assessment to students who attend a study skills program in the center.  Higher scores reflect strong study skills, while low scores reflect weak skills.  She needs to prepare a report that describes the performance of five students who are being considered for an experimental work-study program.  She presents you with her distribution of the test scores.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Score (X)** | ***f*** | ***cf*** | ***cf %*** |
| Sheldon | 56 | 1 | 25 | 100% |
| Robin | 55 | 1 | 24 | 96% |
| Lily | 53 | 1 | 23 | 92% |
| Penny  Barney | 50 | 2 | 22 | 88% |
| Tracy  Leonard | 49 | 2 | 20 | 80% |
| Marshal | 48 | 1 | 18 | 72% |
| Ted  Leslie | 45 | 2 | 17 | 68% |
| Howard | 44 | 1 | 15 | 60% |
| Amy  Bernadette  Stuart | 43 | 3 | 14 | 56% |
| Michael | 40 | 1 | 11 | 44% |
| Pam  Dwight | 39 | 2 | 10 | 40% |
| Jim | 38 | 1 | 8 | 32% |
| Andy | 36 | 1 | 7 | 28% |
| Erin | 35 | 1 | 6 | 24% |
| Ryan | 33 | 1 | 5 | 20% |
| Angela | 32 | 1 | 4 | 16% |
| Kristen | 29 | 1 | 3 | 12% |
| Meredith  Toby | 28 | 2 | 2 | 8% |

Refer to the mean, standard deviation, and ranges for performance based on the normal curve also describe the performance for the five students based on the *cf* % above.

Bernadette:

Toby:

Leonard:

Sheldon:

Angela:

2.   You’ve agreed to take a part-time evening position tutoring students at the local Sylvania Learning Center. The center has gathered assessment information from the students’ schools regarding their reading, writing, and math performance. You need to review the results and determine which students need to be tutored in which subject areas. Using the data below decide which students are **below average** in each subject area.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Reading - %ile rank | Writing - t score | Math - z score |
| Paul | 17 | 36 | -0.6 |
| Tamara | 61 | 57 | +0.4 |
| Danielle | 3 | 19 | -0.8 |
| Vivian | 10 | 57 | +1.6 |
| Chris | 58 | 49 | -2.1 |
| Yakima | 37 | 41 | -0.4 |
| Marnie | 19 | 33 | +.2 |
| Jason | 47 | 52 | +2.3 |
| Leon | 92 | 19 | -0.7 |
| Russell | 26 | 51 | +1.2 |

Which students are below average in Reading?

Which students are below average in Writing?

Which students are below average in Math?