Tasks

Score Interpretation

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1. State TWO differences between norm-reference interpretation and criterion- reference interpretation.

Norm-reference	Criterion-reference
These test measure student's performance in comparison to other students	These assessment and test that measures student's performance
Its main objective is to assess a student's performance with other students.	Its main objective is to help students learn without getting questioned about grades.
Their criteria changes with outcomes.	They have fixed criteria for assessment.
Judged on the basis of other student's performance.	Each student is independently assessed.

2. Calculate the PR, Z-score and ETS for the raw scores below:

X (raw score)	f (frequency)
75	1
74	1
69	2

X	F
67	2
65	3
61	3
59	2
58	2
54	2
49	1
48	1

Answer:

X (raw score)	F (frequency)	PR	F(x)	(x-x)	(x-x)²	f(x-x)²	z	ETS
75	1	97.5	75	13.1	171.61	171.61	1.82	682
74	1	92.5	74	12.1	146.41	146.41	1.68	668
69	2	85	138	7.1	50.41	100.82	0.99	599
67	2	75	134	5.1	26.01	52.02	0.71	571
65	3	62.5	195	3.1	9.61	28.83	0.43	543
61	3	47.5	183	-0.9	0.81	2.43	-0.13	487
59	2	35	118	-2.9	8.41	16.82	-0.40	460
58	2	25	116	-3.9	15.21	30.42	-0.54	446
54	2	15	108	-7.9	62.41	124.82	-1.1	390
49	1	7.5	49	-12.9	166.41	166.41	-1.79	321
48	1	2.5	48	-13.9	193.21	193.21	-1.93	307

English Test

X (raw score)	f (frequency)	PR	f (x)	$(x - \bar{x})$	$(x - \bar{x})^2$	$f(x - \bar{x})^2$	z	ETS
75	1	97.5	75	13.1	171.61	171.61	1.82	682
74	1	92.5	74	12.1	146.41	146.41	1.68	668
69	2	85	138	7.1	50.41	100.82	0.99	599
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48	1	2.5	48	-13.9	193.21	193.21	-1.93	307

Remarks:

To calculate SD, sum up the values in column 7, divided by N (20), then square root it.

$$SD = \frac{171.61 + 146.41 + 100.82 + 52.02 + 28.83 + 2.43 + 16.82 + 30.42 + 124.82 + 166.41 + 193.21}{20}$$

$= \dfrac{1033.8}{20}$

$= 51.69$

$= \sqrt{51.69}$

SD = 7.2