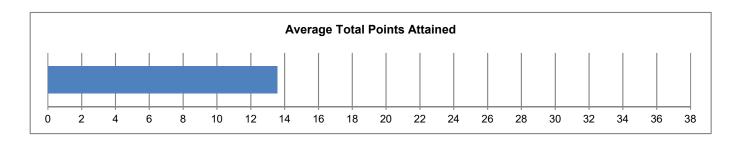# Sam Houston State University

CAT Institutional Report

July 2019 - College of Humanities and Social Sciences

CAT Overview: Descriptive Statistics for CAT Total Score
Sam Houston State University: July 2019 - College of Humanities and Social Sciences

	N	Min.	Max.	Mean	Std. Dev
CAT Total Score	290	1.00	31.00	13.56	5.42

Average Total Points Attained

CAT Demographics: Descriptive Statistics for Sample

		Freq.	Freq. %
Gender	**Male**	100	35.0%
	Female	186	65.0%
Class Standing	**Freshman**	3	1.1%
	Sophomore	25	8.8%
	Junior	106	37.2%
	Senior	151	53.0%
Class	**Undergraduate**	289	100.0%
	Graduate	0	0.0%
Age	**≤ 20 years**	77	28.1%
	21-25 years	172	62.8%
	≥ 26 years	25	9.1%

		Freq.	Freq. %
Race**	**White**	191	65.9%
	Black or African American	57	19.7%
	American Indian or Alaska Native	10	3.4%
	Asian	2	0.7%
	Native Hawaiian or Other Pacific Islander	2	0.7%
	Other Race	37	12.8%

**The cumulative percent may exceed 100% as students are allowed to select more than one category.

		Freq.	Freq. %
Proficiency with the English Language*	**Excellent**	212	73.9%
	Very Good	58	20.2%
	Good	16	5.6%
	Fair	1	0.3%
	Poor	0	0.0%

* Self-rated

	Freq.	Freq. %
Spanish/Hispanic/Latino Ethnicity	94	32.4%
Considered English primary language?	260	89.7%

CAT Breakdown: Frequency of Points Awarded for Each Question
Sam Houston State University: July 2019 - College of Humanities and Social Sciences

	Skill Assessed by CAT Question	Points Awarded	Freq.	Freq. %
Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	0	104	35.9%
		1	186	64.1%
Q2	Evaluate how strongly correlational-type data supports a hypothesis.	0	118	40.7%
		1	99	34.1%
		2	40	13.8%
		3	33	11.4%
Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0	173	59.7%
		1	69	23.8%
		2	34	11.7%
		3	14	4.8%
Q4	Identify additional information needed to evaluate a hypothesis.	0	177	61.0%
		1	85	29.3%
		2	21	7.2%
		3	6	2.1%
		4	1	0.3%
Q5	Evaluate whether spurious information strongly supports a hypothesis.	0	83	28.6%
		1	207	71.4%
Q6	Provide alternative explanations for spurious associations.	0	59	20.3%
		1	123	42.4%
		2	96	33.1%
		3	12	4.1%
Q7	Identify additional information needed to evaluate a hypothesis.	0	212	73.1%
		1	73	25.2%
		2	5	1.7%
Q8	Determine whether an invited inference is supported by specific information.	0	135	46.6%
		1	155	53.4%
Q9	Provide relevant alternative interpretations for a specific set of results.	0	137	47.2%
		1	124	42.8%
		2	29	10.0%
Q10	Separate relevant from irrelevant information when solving a real-world problem.	0	11	3.8%
		1	20	6.9%
		2	43	14.8%
		3	115	39.7%
		4	101	34.8%
Q11	Use and apply relevant information to evaluate a problem.	0	128	44.1%
		1	139	47.9%
		2	23	7.9%
Q12	Use basic mathematical skills to help solve a real-world problem.	0	77	26.6%
		1	213	73.4%
Q13	Identify suitable solutions for a real-world problem using relevant information.	0	142	49.0%
		1	96	33.1%
		2	28	9.7%
		3	24	8.3%
Q14	Identify and explain the best solution for a real-world problem using relevant information.	0	105	36.2%
		1	41	14.1%
		2	8	2.8%
		3	48	16.6%
		4	73	25.2%
		5	15	5.2%
Q15	Explain how changes in a real-world problem situation might affect the solution.	0	214	73.8%
		1	45	15.5%
		2	21	7.2%
		3	10	3.4%

Institutional/Departmental Profile

Sam Houston State University: July 2019 - College of Humanities and Social Sciences

Evaluate and Interpret Info	Problem Solving	Creative Thinking	Effective Comm.		Skill Assessed by CAT Question	Institution/Department Mean	Institution/Department Avg. % of Attainable Points
X				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	0.64	64%
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	0.96	32%
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0.61	20%
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	0.51	13%
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	0.71	71%
		X	X	Q6	Provide alternative explanations for spurious associations.	1.21	40%
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	0.29	14%
X				Q8	Determine whether an invited inference is supported by specific information.	0.53	53%
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	0.63	31%
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	2.95	74%
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	0.64	32%
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	0.73	73%
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	0.77	26%
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	1.96	39%
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	0.40	13%
					CAT Total Score	13.56	36%

The map of skills covered by each question above is a suggested theoretical guide for interpreting results.

Upper Division CAT Means Comparison Report

Sam Houston State University: July 2019 - College of Humanities and Social Sciences

Evaluate and Interpret Info	Problem Solving	Creative Thinking	Effective Comm.		Skill Assessed by CAT Question	Institution	National		
						Mean	Mean	Probability of difference[a]	Effect Size[b]
X				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	0.64	0.67		
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	0.96	1.21	***	-.26
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0.61	1.35	***	-.82
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	0.51	1.41	***	-.96
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	0.71	0.73		
		X	X	Q6	Provide alternative explanations for spurious associations.	1.21	1.56	***	-.41
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	0.29	0.82	***	-.99
X				Q8	Determine whether an invited inference is supported by specific information.	0.53	0.68	***	-.29
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	0.63	0.93	***	-.45
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	2.95	3.14	**	-.18
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	0.64	1.11	***	-.71
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	0.73	0.82	***	-.20
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	0.77	1.18	***	-.45
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	1.96	2.29	**	-.18
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	0.40	1.15	***	-.97
					CAT Total Score	13.56	19.04	***	-1.04

[a]. * p<.05   **p<.01 ***p<.001 (2 –tailed)   Does not Account for entering ACT/SAT.

[b]. Mean difference divided by pooled group standard deviation.

 (0.1 - 0.3 = small effect; 0.3 - 0.5 = moderate effect; >0.5 = large effect)

The map of skills covered by each question above is a suggested theoretical guide for interpreting results.