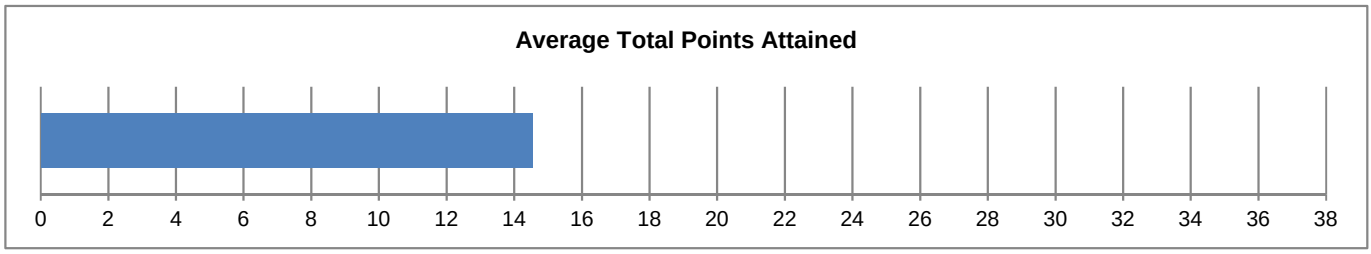
Sam Houston State University

CAT Institutional Report

August 2018 - All Students

CAT Overview: Descriptive Statistics for CAT Total Score
Sam Houston State University: August 2018 - All Students

	N	Min.	Max.	Mean	Std. Dev
CAT Total Score	513	1.00	28.00	14.54	5.17



CAT Demographics: Descriptive Statistics for Sample

		Freq.	Freq. %
Gender	**Male**	164	32.2%
	Female	345	67.8%
Class Standing	**Freshman**	5	1.0%
	Sophomore	25	4.9%
	Junior	206	40.5%
	Senior	273	53.6%
Class	**Undergraduate**	504	99.8%
	Graduate	1	0.2%
Age	**≤ 20 years**	126	26.0%
	21-25 years	311	64.3%
	≥ 26 years	47	9.7%

		Freq.	Freq. %
Race**	**White**	357	69.6%
	Black or African American	83	16.2%
	American Indian or Alaska Native	8	1.6%
	Asian	26	5.1%
	Native Hawaiian or Other Pacific Islander	6	1.2%
	Other Race	61	11.9%

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

		Freq.	Freq. %
Proficiency with the English Language*	**Excellent**	384	75.0%
	Very Good	95	18.6%
	Good	30	5.9%
	Fair	2	0.4%
	Poor	1	0.2%

* Self-rated

	Freq.	Freq. %
Spanish/Hispanic/Latino Ethnicity	144	28.1%
Considered English primary language?	477	93.0%

CAT Breakdown: Frequency of Points Awarded for Each Question

Sam Houston State University: August 2018 - All Students

	Skill Assessed by CAT Question	Points Awarded	Freq.	Freq. %
Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	**0**	206	40.2%
		1	307	59.8%
Q2	Evaluate how strongly correlational-type data supports a hypothesis.	**0**	212	41.3%
		1	197	38.4%
		2	70	13.6%
		3	34	6.6%
Q3	Provide alternative explanations for a pattern of results that has many possible causes.	**0**	268	52.2%
		1	139	27.1%
		2	75	14.6%
		3	31	6.0%
Q4	Identify additional information needed to evaluate a hypothesis.	**0**	259	50.5%
		1	140	27.3%
		2	69	13.5%
		3	37	7.2%
		4	8	1.6%
Q5	Evaluate whether spurious information strongly supports a hypothesis.	**0**	146	28.5%
		1	367	71.5%
Q6	Provide alternative explanations for spurious associations.	**0**	91	17.7%
		1	229	44.6%
		2	161	31.4%
		3	32	6.2%
Q7	Identify additional information needed to evaluate a hypothesis.	**0**	377	73.5%
		1	126	24.6%
		2	10	1.9%
Q8	Determine whether an invited inference is supported by specific information.	**0**	200	39.0%
		1	313	61.0%
Q9	Provide relevant alternative interpretations for a specific set of results.	**0**	242	47.2%
		1	213	41.5%
		2	58	11.3%
Q10	Separate relevant from irrelevant information when solving a real-world problem.	**0**	13	2.5%
		1	26	5.1%
		2	84	16.4%
		3	192	37.4%
		4	198	38.6%
Q11	Use and apply relevant information to evaluate a problem.	**0**	155	30.2%
		1	294	57.3%
		2	64	12.5%
Q12	Use basic mathematical skills to help solve a real-world problem.	**0**	131	25.5%
		1	382	74.5%
Q13	Identify suitable solutions for a real-world problem using relevant information.	**0**	234	45.6%
		1	185	36.1%
		2	59	11.5%
		3	35	6.8%
Q14	Identify and explain the best solution for a real-world problem using relevant information.	**0**	189	36.8%
		1	61	11.9%
		2	13	2.5%
		3	86	16.8%
		4	139	27.1%
		5	25	4.9%
Q15	Explain how changes in a real-world problem situation might affect the solution.	**0**	323	63.0%
		1	104	20.3%
		2	56	10.9%
		3	30	5.8%

Institutional/Departmental Profile

Sam Houston State University: August 2018 - All Students

Evaluate and Interpret Info	Problem Solving	Creative Thinking	Effective Comm.		Skill Assessed by CAT Question	Institution/Department	
						Mean	Avg. % of Attainable Points
X				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	0.60	60%
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	0.86	29%
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0.75	25%
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	0.82	21%
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	0.72	72%
		X	X	Q6	Provide alternative explanations for spurious associations.	1.26	42%
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	0.28	14%
X				Q8	Determine whether an invited inference is supported by specific information.	0.61	61%
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	0.64	32%
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	3.04	76%
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	0.82	41%
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	0.74	74%
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	0.80	27%
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	2.00	40%
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	0.60	20%
					CAT Total Score	14.54	38%

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: August 2018 - All Students

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.	0.60	0.67	***	-.15
X			X	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	0.86	1.21	***	-.35
		X	X	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0.75	1.35	***	-.61
	X	X	X	Q4	Identify additional information needed to evaluate a hypothesis.	0.82	1.41	***	-.52
X				Q5	Evaluate whether spurious information strongly supports a hypothesis.	0.72	0.73		
		X	X	Q6	Provide alternative explanations for spurious associations.	1.26	1.56	***	-.36
	X	X	X	Q7	Identify additional information needed to evaluate a hypothesis.	0.28	0.82	***	-.90
X				Q8	Determine whether an invited inference is supported by specific information.	0.61	0.68	***	-.16
		X	X	Q9	Provide relevant alternative interpretations for a specific set of results.	0.64	0.93	***	-.41
X	X			Q10	Separate relevant from irrelevant information when solving a real-world problem.	3.04	3.14	*	-.10
X	X		X	Q11	Use and apply relevant information to evaluate a problem.	0.82	1.11	***	-.45
	X			Q12	Use basic mathematical skills to help solve a real-world problem.	0.74	0.82	***	-.18
X	X			Q13	Identify suitable solutions for a real-world problem using relevant information.	0.80	1.18	***	-.40
X	X		X	Q14	Identify and explain the best solution for a real-world problem using relevant information.	2.00	2.29	***	-.16
	X	X	X	Q15	Explain how changes in a real-world problem situation might affect the solution.	0.60	1.15	***	-.56
					CAT Total Score	14.54	19.04	***	-.80

[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.