Use the following scenario to answer the following questions Are physically fit people less likely to die of cancer? Suppose an article in a sports medicine journal reported results of a study that fol The most physically fit men had a 58% lower risk of death from cancer than the le 1.	
Identify the population of interest. Choose the correct answer below.	Identify the sample. Choose the correct answer below.
OA. The population of interest is all men who die of cancer.	OA. The sample is all men who exercise.
OB. The population of interest is all men who exercise.	OB. The sample is the 29,770 men aged 30 to 86.
Oc. The population of interest is all men.	Oc. The sample is all men.
\bigcirc D. The population of interest is the 29,770 men aged 30 to 86.	$\bigcirc D$. The sample is all men who die of cancer.
Use the following information to answer the following questions	

The Ashby horse race has been run every year since 1870 in Ashby, Massachusetts. The data for the first few and a few recent races follow.

		Margin				Duration	
Date	Winner	(lengths)	Jockey	Winner's	Payoff (\$)	(min:sec)	Track Condition
May 17, 1870	Blacky	2	William	28	350	2:37.00	Fast
May 19, 1871	Warrior	2	James	39	900	2:37.75	Dusty
May 3, 2005	Lady	43/4	Ben	800	,000	2:01.26	Dusty
May 8, 2006	Euler	23/4	Bruno	810	,000	1:59.97	Slow
3.		4.			5.		
he winner's payoffs is an exa	mple of what type(s)	of data The	duration of the race	is an	The names	of the winning jock	eys is an example of
/lark as many data types that			nple of what type(s)		what type(s		
A Qualitative	,		k as many data type		••••	ny data types that	apply
B Quantitative		0	A Qualitative		🔿 A Qual	itative	
🔿 C Discrete		0	B Quantitative		🔵 B Quar	ntitative	
🔿 D Continuous		0	C Discrete		🔿 C Discr	ete	
		0	D Continuous		🔿 D Cont	inuous	
5. Explain the difference b	etween a parameter a	nd a statistics					

Name_

Use the following information to answer the following questions		
In 1991, a magazine collected data and published an article evaluating washin	g machines. It listed 43 models, giving the bra	and, cost(dollars), size (cu. ft.), type,
estimated annual energy cost (dollars), an overall rating (good, excellent, etc.)	, and repair history for that brand (percentag	e requiring repairs over the past 5
years)		
7.	8.	9.
The size of the washing machines is an example of what type(s) of data	The overall rating of the machines is an	The estimated annual energy
Mark as many data types that apply	example of what type(s) of data	cost is an example of what
A Qualitative	Mark as many data types that apply	type(s) of data
O B Quantitative	A Qualitative	Mark as many data types that
○ C Discrete	🔿 B Quantitative	apply
O D Continuous	🔿 C Discrete	A Qualitative
	D Continuous	B Quantitative
		C Discrete
		🔿 D Continuous
10. Money and time are sometimes confusing things to classify as discrete or	continuous, so carefully answer the following	:
10 a) Why is money in paper and coin form discrete information (despite the u	use of the decimal system)? Use less than 50 v	words to explain
10b) Give an example the use of time that can be considered discrete		
10c) Give an example of the use of time that must be continuous		
11.	12.	
State whether the data described below are discrete or continuous, and explain why.	State whether the data described below are dis	screte or continuous, and explain why.
The capacities of different hotels	The lengths of carrots produced by a farm	
Choose the correct answer below.	Choose the correct answer below.	
OA. The data are continuous because the data can only take on specific values.	OA. The data are discrete because the data	can only take on specific values.
OB. The data are continuous because the data can take on any value in an interval.	OB. The data are discrete because the data	
Oc. The data are discrete because the data can only take on specific values.	-	-
	OC. The data are continuous because the data	ta can take on any value in an interval.
OD. The data are discrete because the data can take on any value in an interval.	OD. The data are continuous because the dat	ta can only take on specific values.
		-

13A. For the data described below, identify the level of measurement as nominal, ordinal, interval, or ratio. A music critic's review scale (must listen, good, fair, bad, horrible) Choose the correct answer below. ordinal ratio interval	14A. For the data described below, identify the level of measurement as nominal, ordinal, interval, or ratio. The distances (in miles) of different movie theaters from a person's house Choose the correct answer below. ordinal ratio interval
 nominal 13B. Explain why you made that data classification BE SPECIFIC 	 nominal 14B. Explain why you made that data classification BE SPECIFIC
15A For the data described below, identify the level of measurement as nominal, ordinal, interval, or ratio. The average temperatures (in degrees Celsius) of different locations Choose the correct answer below. ratio interval ordinal nominal 15B. Explain why you made that data classification BE SPECIFIC	 16. Percentages Basics 16A. Find 15.64% of 249 (round answer to four decimal places of accuracy) 16B. Determine the percentage of people that saw the movie, "Straight Out of Compton", on opening weekend in a class of 46 people if 12 responded that they saw the movie (round to nearest tenth of a percent) 16C. 82.5% of what number is 165? (round answer to four decimal places of accuracy)

17			
	anch of a certain Government was \$4900	million, and this year it is \$5312 million.	
Consider last year's budget of \$4900 mi			
17A	17B	17C	17D
What was the absolute change in the budget from last year to this year?	What is the relative change from last year to this year?	Proposal from the House If next year's budget is estimated to be \$5202 million, then what is the percent decrease from this year's budget of \$5312 million?	Proposal from the Senate If next year's budget is 3% less than this year's budget of \$5312, then determine the budget for next year?
million	% (round to nearest tenth of a percent)	% (round to nearest tenth of a percent)	million (round to nearest tenth of a million)
18			
	-	957 pled guilty, and 395 of them were se	ntenced to prison. Among the 78 other
criminals, who pled not guilty, 51 were	•	100	100
18A What percentage of criminals pled guilty?	18B What percentage of the criminals were sent to prison?	18C Among those who pled guilty, what is the percentage who were sent to prison?	18D Among those who pled NOT guilty, what is the percentage who were sent to prison?
% (round to nearest tenth of a percent)	% (round to nearest tenth of a percent)	% (round to nearest tenth of a percent)	% (round to nearest tenth of a percent)
19. Define census (Use less than 50 words)		20. Explain the difference between descrip	tive statistics and inferential statistics
	·		·
			·································

Use the following scenario to a Are physically fit people less lik	ely to die of cancer?					
Suppose an article in a sports m The most physically fit men had			•	•	U years.	
1.			2.			
Identify the sample. Choose	e the correct answer	below.	Iden	tify the population of intere	st. Choose the corr	ect answer below.
○A. The sample is all mer	n who exercise.		OA	The population of interes	t is all men who die	e of cancer.
OB. The sample is the 29	,770 men aged 30 to	86.	Ов	The population of interes	t is all men who ex	ercise.
OC. The sample is all mer	n.		00	The population of interes	t is all men.	
OD. The sample is all me	n who die of cancer.		OD	The population of interes	t is the 29,770 men	aged 30 to 86.
Use the following information t	o answer the follow	ing questions				
The Ashby horse race has been run e	every year since 1870 in A	shby, Massachusetts. The dat Margin	a for the first few and a	few recent races follow.	Duration	
Date	Winner	(lengths)	Jockey	Winner's Payoff (\$)	(min:sec)	Track Condition

		Margin			Duration		
Date	Winner	(lengths)	Jockey	Winner's Payoff (\$)	(min:sec)	Track Condition	
May 17, 1870	Blacky	2	William	2850	2:37.00	Fast	
May 19, 1871	Warrior	2	James	3900	2:37.75	Dusty	
May 3, 2005	Lady	43/4	Ben	800,000	2:01.26	Dusty	
May 8, 2006	Euler	23/4	Bruno	810,000	1:59.97	Slow	
3.		4.		5.			
he duration of the race is an	example of what type(s) of	The names	s of the winning jockeys is	s an The winner's	payoffs is an examp	ple of what type(s) of	
data			f what type(s) of data	data		,. , ,	
A Qualitative			/ Mark as many	rk as many data types that apply			
B Quantitative		🔵 A Qua	O A Qualitative O A Qualitative		ative		
C Discrete		O B Quantitative		🔿 B Quanti	O B Quantitative		
D Continuous		🔿 C Disc	crete	🔿 C Discret	e		
		🔿 D Con	ntinuous	🔿 D Contin	uous		
Explain the difference be	etween a parameter and a s	tatistics					

Use the following information to answer the following questions		
In 1991, a magazine collected data and published an article evaluating washing	g machines. It listed 43 models, giving the bra	and, cost(dollars), size (cu. ft.), type,
estimated annual energy cost (dollars), an overall rating (good, excellent, etc.)	, and repair history for that brand (percentag	e requiring repairs over the past 5
years)		
7.	8.	9.
The size of the washing machines is an example of what type(s) of data	The overall rating of the machines is an	The estimated annual energy
Mark as many data types that apply	example of what type(s) of data	cost is an example of what
A Qualitative	Mark as many data types that apply	type(s) of data
O B Quantitative	A Qualitative	Mark as many data types that
○ C Discrete	O B Quantitative	apply
O D Continuous	C Discrete	A Qualitative
	🔘 D Continuous	B Quantitative
		C Discrete
		🔘 D Continuous
10. Money and time are sometimes confusing things to classify as discrete or	continuous, so carefully answer the following	:
10 a) Why is money in paper and coin form discrete information (despite the u	se of the decimal system)? Use less than 50	words to explain
10b) Give an example the use of time that can be considered discrete		
10c) Give an example of the use of time that must be continuous		
11.	40	
State whether the data described below are discrete or continuous, and explain why.	12.	
	 State whether the data described below are dis 	crete or continuous, and explain why.
	State whether the data described below are dis	crete or continuous, and explain why.
The capacities of different hotels		screte or continuous, and explain why.
The capacities of different hotels Choose the correct answer below.	State whether the data described below are dis	screte or continuous, and explain why.
	State whether the data described below are dis The lengths of carrots produced by a farm Choose the correct answer below.	
Choose the correct answer below. OA. The data are continuous because the data can only take on specific values.	State whether the data described below are dis The lengths of carrots produced by a farm Choose the correct answer below. OA. The data are discrete because the data of	can only take on specific values.
Choose the correct answer below. OA. The data are continuous because the data can only take on specific values. OB. The data are continuous because the data can take on any value in an interval.	State whether the data described below are dis The lengths of carrots produced by a farm Choose the correct answer below. OA. The data are discrete because the data of OB. The data are discrete because the data of	can only take on specific values. can take on any value in an interval.
Choose the correct answer below. A. The data are continuous because the data can only take on specific values. B. The data are continuous because the data can take on any value in an interval. C. The data are discrete because the data can only take on specific values. 	State whether the data described below are dis The lengths of carrots produced by a farm Choose the correct answer below. OA. The data are discrete because the data of	can only take on specific values. can take on any value in an interval.
Choose the correct answer below. OA. The data are continuous because the data can only take on specific values. OB. The data are continuous because the data can take on any value in an interval.	State whether the data described below are dis The lengths of carrots produced by a farm Choose the correct answer below. OA. The data are discrete because the data of OB. The data are discrete because the data of	can only take on specific values. can take on any value in an interval. ta can take on any value in an interval.

13			
, .	anch of a certain Government was \$3500	million, and this year it is \$3312 million.	
Consider last year's budget of \$3500 million	11100 to be the reference value.	13C	13D
What was the absolute change in the budget from last year to this year?	What is the relative change from last year to this year?	Proposal from the House If next year's budget is estimated to be \$3280 million, then what is the percent decrease from this year's budget of \$3312 million?	Proposal from the Senate If next year's budget is 4% less than this year's budget of \$3312, then determine the budget for next year?
million	% (round to nearest tenth of a percent)	% (round to nearest tenth of a percent)	million (round to nearest tenth of a million)
14 A study was collected of pleas made by other criminals, who pled not guilty, 69	-	1952 pled guilty, and 856 of them were s	entenced to prison. Among the 98
14A	14B	14C	14D
What percentage of criminals pled guilty?	What percentage of the criminals were sent to prison?	Among those who pled guilty, what is the percentage who were sent to prison?	Among those who pled NOT guilty, what is the percentage who were sent to prison?
% (round to nearest tenth of a percent)	% (round to nearest tenth of a percent)	% (round to nearest tenth of a percent)	% (round to nearest tenth of a percent)
15. Define census (Use less than 50 words)		16. Explain the difference between descrip	tive statistics and inferential statistics
	·		·-·

17A.	18A.
For the data described below, identify the level of measurement as nominal, ordinal, interval, or ratio.	For the data described below, identify the level of measurement as nominal, ordinal, interval, or ratio.
The distances (in miles) of different movie theaters from a person's house	A music critic's review scale (must listen, good, fair, bad, horrible)
Choose the correct answer below.	Choose the correct answer below.
ordinal	ordinal
🔿 ratio	🔿 ratio
interval	interval
O nominal	o nominal
17B. Explain why you made that data classification BE SPECIFIC	18B. Explain why you made that data classification BE SPECIFIC
19A	20. Percentages Basics
For the data described below, identify the level of measurement as nominal, ordinal, interval, or ratio.	20. Fercentages basics
The average temperatures (in degrees Celsius) of different locations	20A. Find 36.45% of 456 (round answer to four decimal places of accuracy)
Choose the correct answer below.	
O ratio	
interval	
○ ordinal	20B. Determine the percentage of people that saw the movie, "Straight Out of
O nominal	Compton", on opening weekend in a class of 52 people if 38 responded that
19B. Explain why you made that data classification BE SPECIFIC	they saw the movie (round to nearest tenth of a percent)
	20C. 68.5% of what number is 213? (round answer to four decimal places of accuracy)

nch of a certain Government was \$4500 llion to be the reference value. 1B What is the relative change from last year to this year?	million, and this year it is \$4120 million. 1C Proposal from the House If next year's budget is estimated to be \$3980 million, then what is the	1D Proposal from the Senate If next year's budget is 6% less than
llion to be the reference value. 1B What is the relative change from last	1C Proposal from the House If next year's budget is estimated to be \$3980 million, then what is the	Proposal from the Senate
1B What is the relative change from last	Proposal from the House If next year's budget is estimated to be \$3980 million, then what is the	Proposal from the Senate
-	Proposal from the House If next year's budget is estimated to be \$3980 million, then what is the	•
	percent decrease from this year's budget of \$4120 million?	this year's budget of \$4120, then determine the budget for next year?
% (round to nearest tenth of a percent)	% (round to nearest tenth of a percent)	million (round to nearest tenth of a million)
3075 criminals. Among those criminals,	2578 pled guilty, and 1856 of them were	sentenced to prison. Among the 497
ere sent to prison		
2B	2C	2D
What percentage of the criminals were sent to prison?	Among those who pled guilty, what is the percentage who were sent to prison?	Among those who pled NOT guilty, what is the percentage who were sent to prison?
% (round to nearest tenth of a percent)	% (round to nearest tenth of a percent)	% (round to nearest tenth of a percent)
	4. Explain the difference between descrip	tive statistics and inferential statistics
	(round to nearest tenth of a percent) 3075 criminals. Among those criminals, 9 were sent to prison 2B What percentage of the criminals were sent to prison? %	(round to nearest tenth of a percent) % (round to nearest tenth of a percent) 3075 criminals. Among those criminals, 2578 pled guilty, and 1856 of them were 9 were sent to prison 2B 2C What percentage of the criminals Among those who pled guilty, what is were sent to prison? % % % % (round to nearest tenth of a percent) %

Are physically fit people less likely to die of cancer?

Suppose an article in a sports medicine journal reported results of a study that followed 29,770 men aged 30 to 86 for 10 years.

The most physically fit men had a 58% lower risk of death from cancer than the least fit group.

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•••

Identify the sample. Choose the correct answer below.

- ○A. The sample is all men who exercise.
- OB. The sample is the 29,770 men aged 30 to 86.
- Oc. The sample is all men.
- OD. The sample is all men who die of cancer.

6.

Identify the population of interest. Choose the correct answer below.

- OA. The population of interest is all men who die of cancer.
- OB. The population of interest is all men who exercise.
- OC. The population of interest is all men.
- OD. The population of interest is the 29,770 men aged 30 to 86.

Use the following information to answer the following questions

The Ashby horse race has been run every year since 1870 in Ashby, Massachusetts. The data for the first few and a few recent races follow.

-	····, , ,	Margin			Duration	
Date	Winner	(lengths)	Jockey	Winner's Payoff (\$)	(min:sec)	Track Condition
May 17, 1870	Blacky	2	William	2850	2:37.00	Fast
May 19, 1871	Warrior	2	James	3900	2:37.75	Dusty
May 3, 2005	Lady	43/4	Ben	800,000	2:01.26	Dusty
May 8, 2006	Euler	23/4	Bruno	810,000	1:59.97	Slow
7.		8.		9.		
The winner's payoffs is an example of what type(s) of data The names of the winnir Mark as many data types that apply is an example of what type		es of the winning jockeys	The duration of the race is an example of what type(s) of			
		is an example of what type(s) of		data		
🔿 A Qualitative		data		Mark as many data types that apply		
🔿 B Quantitative		Mark as many data types that		A Qualitative		
C Discrete		apply		🔘 B Quantitativ	/e	
O D Continuous		A Qualitative		O C Discrete		
	0		uantitative	🔿 D Continuou	s	
		C Discrete				
		🔘 D Continuous				
10. Explain the difference b	etween a parameter and a s	tatistics				
·	·					
						,

Use the following information to answer the following questions					
In 1991, a magazine collected data and published an article evaluating washing machines. It listed 43 models, giving the brand, cost(dollars), size (cu. ft.), type,					
estimated annual energy cost (dollars), an overall rating (good, excellent, etc.)	, and repair history for that brand (percentag	e requiring repairs over the past 5			
years)					
11.	12.	13.			
The size of the washing machines is an example of what type(s) of data	The overall rating of the machines is an	The estimated annual energy			
Mark as many data types that apply	example of what type(s) of data	cost is an example of what			
O A Qualitative	Mark as many data types that apply	type(s) of data			
O B Quantitative	A Qualitative	Mark as many data types that			
O C Discrete	O B Quantitative	apply			
O D Continuous	O C Discrete	A Qualitative			
	O D Continuous	O B Quantitative			
	-	O C Discrete			
		O D Continuous			
		_			
14. Money and time are sometimes confusing things to classify as discrete or	continuous, so carefully answer the following				
14 a) Why is money in paper and coin form discrete information (despite the u					
	, ,	·			
14b) Give an example the use of time that can be considered discrete					
14c) Give an example of the use of time that must be continuous					
15.	16.				
State whether the data described below are discrete or continuous, and explain why.	Center with reference the dates descention of the large and di				
	State whether the data described below are div	screte or continuous, and explain why			
The capacities of different hotels	State whether the data described below are di	screte or continuous, and explain why.			
	The lengths of carrots produced by a farm	screte or continuous, and explain why.			
	The lengths of carrots produced by a farm	screte or continuous, and explain why.			
Choose the correct answer below.		screte or continuous, and explain why.			
Choose the correct answer below. OA. The data are continuous because the data can only take on specific values.	The lengths of carrots produced by a farm				
	The lengths of carrots produced by a farm Choose the correct answer below. OA. The data are discrete because the data	can only take on specific values.			
OA. The data are continuous because the data can only take on specific values.	The lengths of carrots produced by a farm Choose the correct answer below. OA. The data are discrete because the data OB. The data are discrete because the data	can only take on specific values. can take on any value in an interval.			
 OA. The data are continuous because the data can only take on specific values. OB. The data are continuous because the data can take on any value in an interval. OC. The data are discrete because the data can only take on specific values. 	The lengths of carrots produced by a farm Choose the correct answer below. OA. The data are discrete because the data OB. The data are discrete because the data OC. The data are continuous because the data	can only take on specific values. can take on any value in an interval. ta can take on any value in an interval.			
OA. The data are continuous because the data can only take on specific values.OB. The data are continuous because the data can take on any value in an interval.	The lengths of carrots produced by a farm Choose the correct answer below. OA. The data are discrete because the data OB. The data are discrete because the data	can only take on specific values. can take on any value in an interval. ta can take on any value in an interval.			

17A.	18A.	
For the data described below, identify the level of measurement as nominal, ordinal, interval, or ratio.	For the data described below, identify the level of measurement as nominal, ordinal, interval, or ratio.	
The average temperatures (in degrees Celsius) of different locations	The distances (in miles) of different movie theaters from a person's house	
Choose the correct answer below.	Choose the correct answer below.	
🔿 ratio	ordinal	
o interval	oratio	
ordinal	interval	
o nominal	o nominal	
17B. Explain why you made that data classification BE SPECIFIC	18B. Explain why you made that data classification BE SPECIFIC	
19A	20. Percentages Basics	
For the data described below, identify the level of measurement as nominal, ordinal, interval, or ratio.	204 Find 52 120(of 0.07 (nound annuar to four desired places of assures)	
A music critic's review scale (must listen, good, fair, bad, horrible)	20A. Find 52.13% of 987 (round answer to four decimal places of accuracy)	
Choose the correct answer below.		
ordinal		
○ ratio		
interval	20B. Determine the percentage of people that saw the movie, "Straight Out of	
O nominal	Compton", on opening weekend in a class of 68 people if 18 responded that they saw the movie (round to nearest tenth of a percent)	
19B. Explain why you made that data classification BE SPECIFIC		
·	20C. 14.5% of what number is 549? (round answer to four decimal places of accuracy)	