	< Inla	wc1 2.
Name	XIII	MSKY
Mr. Sc	hlansky	_ /



Date _____

Normal Distribution Without the Curve

_		in the United States are normal of 2.75 inches. The percent of earest whole percent, is	women whose heights	
	mean of 1450 hours and	vatt lightbulb produced by a con a standard deviation of 8.5 hour at random, what is the probabil $\frac{\text{Nofmal cd} F}{\text{lower} = 1440}$ $\text{upper} = 1450$ $\text{I} = 8.5$	rs. If a 60-watt lightb	ulb produced by ll be between 1440
	U.S. History. On approximately nor deviation of 7. Stumust attend summers	the April report card, the mally distributed with a medents who earn a grade lesser school. The number thool for U.S. History is clo	e students' grades an of 79 and a stand is than or equal to of students who r	the are $10000 = 0$ 10000 = 0 10000 = 0
	(1) 3	J2 10		·021 (440)= 10
	(2) 5	(4) 22		

4. The number of hours students spent studying for their Regents exam is normally distributed with a mean of 14 hours and a standard deviation of 3.2 hours. If a student is randomly selected, what is the probability that they spent less than 5 hours studying? What is the probability that a student spent more than 22 hours studying? Round your answer to the nearest tenth of a percent.

not mal cd?

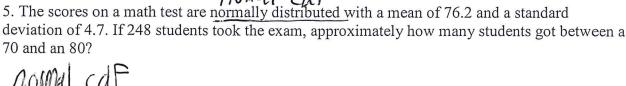
love (= 2 2 , 666...

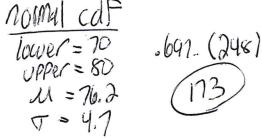
upper = 1,000,000

il = 14

J = 3.2

10/19/1 cdf 10/19/1=0 UPPER=5 .002. M = 14 J = 3.2 0.2%





6. The number of hours of sleep employees at a company get per night is normally distributed with a mean of 7.1 hours and a standard deviation of 1.4 hours. If an employee is randomly selected, what is the probability they sleep between 5 and 8 hours each night? Round your answer to the *nearest percent*. If there are 2500 employees at the company, approximately how many of them, to the nearest person, got less than 5 hours of sleep?

lower = « upper = 8 M = 1.1 T = 1.4

.613 (100) 407/ lower = 0 no!ml cd = 0 pper = 5

,048... (2500)

7. The heights of students in an elementary school are normally distributed with a mean of 35.7 inches and a standard deviation of 3.2 inches. If a student is chosen at random from the elementary school, what is the probability that they will be between 34 and 35 inches? If there 235 students in the elementary school, to the nearest child, how many students are more than 40 inches tall?

UPPO/iaaaaaaaa U=35.7 T=3.2

.6895.(235)

8. The GPAs of students in an Honors math class are normally distributed with a mean of 94.7 and a standard deviation of 1.6. What is the probability that a student selected at random in this math class will have a GPA between 90 and 95? Round your answer to the nearest percent. If there are 28 students in the class, to the nearest student, how many have a GPA higher than 96? DAPEC: agaggagg U: 94.7 J: 1.6 ,20825, (28) · 5722 (100) 9. The weights of students on the boys cross country team is normally distributed with a mean of 135.3 pounds and a standard deviation of 2.8 pounds. Jackson believes that the probability of a student being between 132 and 134 is greater than the probability of a student being between 135 and 136.5 pounds. Is Jackson correct? Justify your answer. 10, 2019, 2, 2085 UPPER: 136.5 M: 135.3 J: 2.8 . 2085446281 .2019370463 10. The weight of a bag of pears at the local market averages 8 pounds with a standard deviation of 0.5 pound. The weights of all the bags of pears at the market closely follow a normal distribution. Determine what percentage of bags, to the nearest integer, weighed less than 8.25 pounds. If there are 225 bags at the local market, to the nearest integer, how many bags weigh more than 9 pounds? VIPE (: 9901agag

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