Empirical Rule Classwork

Please draw a rough diagram for each question and show all your work!

1. The lifespans of gorillas in a particular zoo are normally distributed. The average gorilla lives 20.8 years; the standard deviation is 3.1 years.

Use the empirical rule to estimate the probability of a gorilla living less than 23.9 years. 50+34=84

1. The lifespans of meerkats in a particular zoo are normally distributed. The average meerkat lives 13.1 years; the standard deviation is 1.5 years.

Use the empirical rule to estimate the probability of a meerkat living longer than 14.6 years. 100-86=16

1. The lifespans of lions in a particular zoo are normally distributed. The average lion lives 12.5years; the standard deviation is 2.4 years.

Use the empirical rule to estimate the probability of a lion living less than 10.1 years.

100-86=16

1. The lifespans of tigers in a particular zoo are normally distributed. The average tiger lives 22.4 years; the standard deviation is 2.7 years.

Use the empirical rule to estimate the probability of a tiger living between 27.8 and 30.5 years. 99.7-95/2=2.35