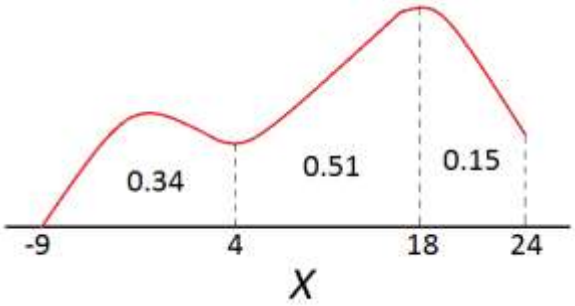
Name:_____ Math 130 Day 10 Lecture Worksheet
Date: Section 7.1: Continuous Random Variables

Ex 1: Let X be a random variable with the following density curve.



a) What are the possible values of X ?
b) Find $P(18 \leq X \leq 24)$
c) Find $P(4 \leq X \leq 24)$
d) Find $P(-13 \leq X \leq 18)$
e) Find $P(X = 4)$
f) Explain the meaning of the probabilities found in (b)-(e)

Ex 2: Suppose X has a uniform distribution over the interval [3, 15].

a) Find the value of c that makes this curve a probability distribution
b) Find $P(3 \leq X \leq 7)$
c) Find $P(8 \leq X \leq 10)$
d) Find $P(10 \leq X \leq 22)$
e) Find $P(X = 7)$
f) Explain the meaning of the probabilities found in (b)-(e)