Problem 6

Take home. Justify/explain all answers. Refer to the discrete probability distribution shown below.

x	-2	5	7	8	12
$P(x)$	.22	.18	.16	??	.13

(a) Identify the missing probability.

(b) Use R to compute the expected value of this random variable. Include both code and a numerical answer.

(c) Briefly interpret your answer to part (b) in non-technical language.

(d) Use R to compute the variance and standard deviation of this random variable. Include both code and a numerical answer.