

COMPUTER SCIENCE E-20, SPRING 2015

Homework Problems

Sets

**Due Thursday, March 5, 2015 before 9PM EST. Upload a PDF of your answers at <https://canvas.harvard.edu/courses/1815/assignments/19890>**

1. Let  $X$  and  $Y$  be sets. Provide a formula for the cardinality of the set  $A = (X \times Y) - (Y \times X)$  in terms of the cardinalities of  $X$ ,  $Y$ ,  $X - Y$ , and  $Y - X$ .