

Please complete the following problems for homework. Check Mrs. Kent's website for due dates.

Homework is an independent assignment and must be completed without assistance from other students. Students may not use unauthorized assisted devices on this assignment, including but not limited to Excel or other computer software/programs/devices. A handheld calculator to assist with arithmetic may be used. All problems must show all work on this paper (or an attached paper) to receive any credit since partial credit is only available on tests or quizzes.

1. A number is selected from all the prime numbers which are smaller than 30.
 - a. List the sample space.

- b. Let W be the event that the number selected is at least 11.
 - i. Express W using the listing method.

- ii. Find $P(W)$ and $P(W')$.

2. Use the word AIM for the following:

a. List the sample space when all the letters from the word "AIM" are arranged from left to right in any order.

b. Let Q be the even that the middle letter is a vowel.

i. Express Q and Q' using the listing method.

ii. Hence find $P(Q)$ and $P(Q')$.

