

Name _____

Homework 5

Section 1.5

1. (7) A rectangular garden which is $12\text{ ft} \times 16\text{ ft}$ is surrounded by a walkway which is a uniform width. If the walkway has an area of 165 ft^2 , what is the width of the walkway?

2. (7) Alice can decrypt 3 files in twice as long as Bob can decrypt 1 file. It takes Charlie 3 hours longer to decrypt 1 file than it takes Bob to decrypt a file. If Alice, Bob, and Charlie all work together, it takes them 16 hours to 10 files. How long does it take Bob to decrypt 1 file by himself?

3. (6) The length of a rectangle is 6 more than the width. If the area of the rectangle is numerically 131 more than its perimeter, what are the dimensions of the rectangle?