

Name: \_\_\_\_\_

1. Suppose a farmer's wheat crop is blighted by various diseases as follows:

- 30% is infected by pink seed
- 25% is infected by yellow leaf
- 15% is infected by ergot
- 15% is infected by pink seed and yellow leaf
- 10% is infected by pink seed and ergot
- 10% is infected by yellow leaf and ergot
- 5% is infected by all three diseases

Find the percentage of the wheat crop infected by at least one disease.

2. Suppose an urn contains three red balls, two green balls, and one blue ball. You draw three balls from the urn without replacement, except that both of the first two balls are returned to the urn if they are the same color. Find the probability that the third ball drawn is red.