

Name: _____
MAT 221: Section 1

Fall 2014
Quiz 3

Note: You must show the details of the work to receive credit. Simply providing the final answer from a calculator will get **ZERO** points.

Given below is the distribution of blood types for a randomly chosen person from a certain population:

| Blood Type | A | B | AB | O |
|-------------|------|---|------|------|
| Probability | 0.41 | | 0.09 | 0.39 |

1. (3 points) Find the probability that a randomly selected person from this population has blood type B.

2. (4 points) Jane who is from this population has blood type A. She can safely receive blood transfusions from people with blood type A or blood type O. What is the probability that a randomly chosen person from this population can donate blood to Jane?

3. (3 points) If two people from this population is selected at random, independently of each other, what is the probability that both of them have blood type A?