

Each person has one of eight blood types. The data below from the American Red Cross shows what fraction of the population has each blood type. A person who needs a blood transfusion cannot receive blood from just anyone. The blood must be a certain type, or complications arise, and the person could even die.

A+	A-	B+	B-	AB+	AB-	O+	O-
$\frac{17}{50}$	$\frac{3}{50}$	$\frac{2}{25}$	$\frac{3}{200}$	$\frac{1}{25}$	$\frac{1}{200}$	$\frac{39}{100}$	$\frac{7}{100}$

The following table lists the types of blood that a person of each blood type can receive.

Patient Type	Can RECEIVE types...	Patient Type	Can RECEIVE types...
A+	A+, A-, O+, O-	AB+	All types
A-	A-, O-	AB-	A-, B-, AB-, O-
B+	B+, B-, O+, O-	O+	O+, O-
B-	B-, O-	O-	O-

Simplify all answers.

1.	Which blood type is the most common?	
2.	Which blood type is the least common?	
3.	The sum of all of the blood types is...	
4.	Determine the fraction of the population from which each patient type can receive blood.	A+
		B+
		A-
		B-
4.	Determine the fraction of the population from which each patient type can receive blood.	AB+
		O+
		AB-
		O-
5.	If a person can receive a large number of blood types, can that person receive blood from a larger fraction of the population? Explain.	
6.	People with O- blood are known as “universal donors.” Why do you think they are called this?	
7.	A “universal recipient” is a person who can receive blood from anyone, regardless of their blood type. What fraction of the population are universal recipients? Explain.	