



## Exercise 20

### Analysis of the Radial Velocity Curve for a Binary Star

**Gamma Velocity for PB1:** \_\_\_\_\_ km/sec

**Computation of the mass ratio, which must be a number less than 1.00.**

Value of RV for star 1 at phase 0.25 read from Radial Velocity Curve: \_\_\_\_\_ km/sec

Value of RV for star 2 at phase 0.25 read from Radial Velocity Curve: \_\_\_\_\_ km/sec

Mass Ratio,  $q$ , which is the absolute Value of the ratio of the smaller RV to larger RV at phase 0.25:

$q =$  \_\_\_\_\_

Value of RV for star 1 at phase 0.75 read from Radial Velocity Curve: \_\_\_\_\_ km/sec

Value of RV for star 2 at phase 0.75 read from Radial Velocity Curve: \_\_\_\_\_ km/sec

Mass Ratio,  $q$ , which is the absolute value of ratio of smaller RV to larger RV at phase 0.7 :

$q =$  \_\_\_\_\_

The two values of  $q$  should almost be the same number.