

PLANETARY TIME TRAVEL ANSWER SHEET



WRITE AN EQUATION FOR DETERMINING THE DISTANCE MERCURY IS FROM EARTH:

Mercury distance from Earth = Earth distance from Sun - Mercury distance from Sun

WRITE AN EQUATION FOR DETERMINING THE DISTANCE JUPITER IS FROM EARTH:

Jupiter distance from Earth = Jupiter distance from Sun - Earth distance from Sun

TABLE 1

PLANET	DISTANCE FROM THE SUN (KM)	DISTANCE FROM EARTH (KM)
MERCURY	57,900,000	91,700,000
VENUS	108,200,000	41,400,000
EARTH	149,600,000	0
MARS	227,900,000	78,300,000
JUPITER	778,600,000	629,000,000
SATURN	1,433,500,000	1,283,900,000
URANUS	2,872,500,000	2,722,900,000
NEPTUNE	2,872,500,000	4,345,500,000



WRITE AN EQUATION FOR DETERMINING TRAVEL TIME, T:

$t \text{ (h)} = \text{distance (km)} \div \text{speed (km/h)}$

TABLE 2

PLANET	WALKING (5 KM/H)	RIDING BIKE (20 KM/H)	DRIVING CAR (120 KM/H)	SOLAR PROBE (365,000 KM/H)	SPEED OF LIGHT
MERCURY	18,340,000	4,585,000	764,167	251.23	0.08
VENUS	8,280,000	2,070,000	345,000	113.42	0.04
EARTH	0	0	0	0	0
MARS	15,660,000	3,915,000	652,500	214.52	0.07
JUPITER	125,800,000	31,450,000	5,241,667	1,723.29	0.58
SATURN	256,780,000	64,195,000	10,699,167	3,517.53	1.19
URANUS	544,580,000	136,145,000	22,690,833	7,460.00	2.52
NEPTUNE	869,100,000	217,275,000	36,212,500	11,905.48	4.03

