

GENERAL INSTRUCTIONS.

1. Assume that today Mars and Earth are on opposite sides of the sun. If you have an interplanetary probe that you wish to send to Mars on a 192 day semi-tangential transfer orbit,

(a) determine the angle between Mars and Earth (with the sun being the vertex) necessary on launch day for mission success, and

(b) determine how long you will have to wait (from today) before launching your satellite.