

Problem Set Seven

Exercises

8.2: 1, 7, **8**, **14**, **18**, 21, 23, **25**, **32**, **37**, 46,51

8.3: 1, **2**, **6**

8.4: 3, **5**, **10**

Problems

Two trains, initially 200 miles apart, are travelling towards each other, each moving at 50 mi/hr. A fly between the two trains, flies between them at 100 mi/hr (when he hits one train he changes direction and flies towards the other). Find the distance travelled by the fly in two different ways:

(a) sum the infinite series;

(b) calculate the amount of time the fly flies and multiply by the velocity.