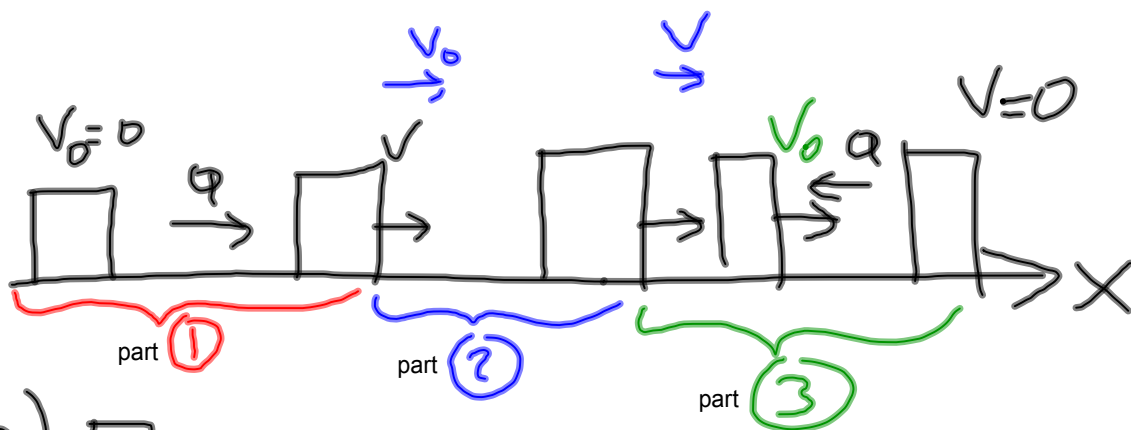1. A train accelerates from rest at a rate of $4\,\frac{m}{s^2}$ for 5 minutes. Then it continues with constant velocity for 10 minutes. Then it slows down to a complete stop while traveling 200 m.
a) What was the total displacement of the train?
b) What was the average velocity for the entire trip?
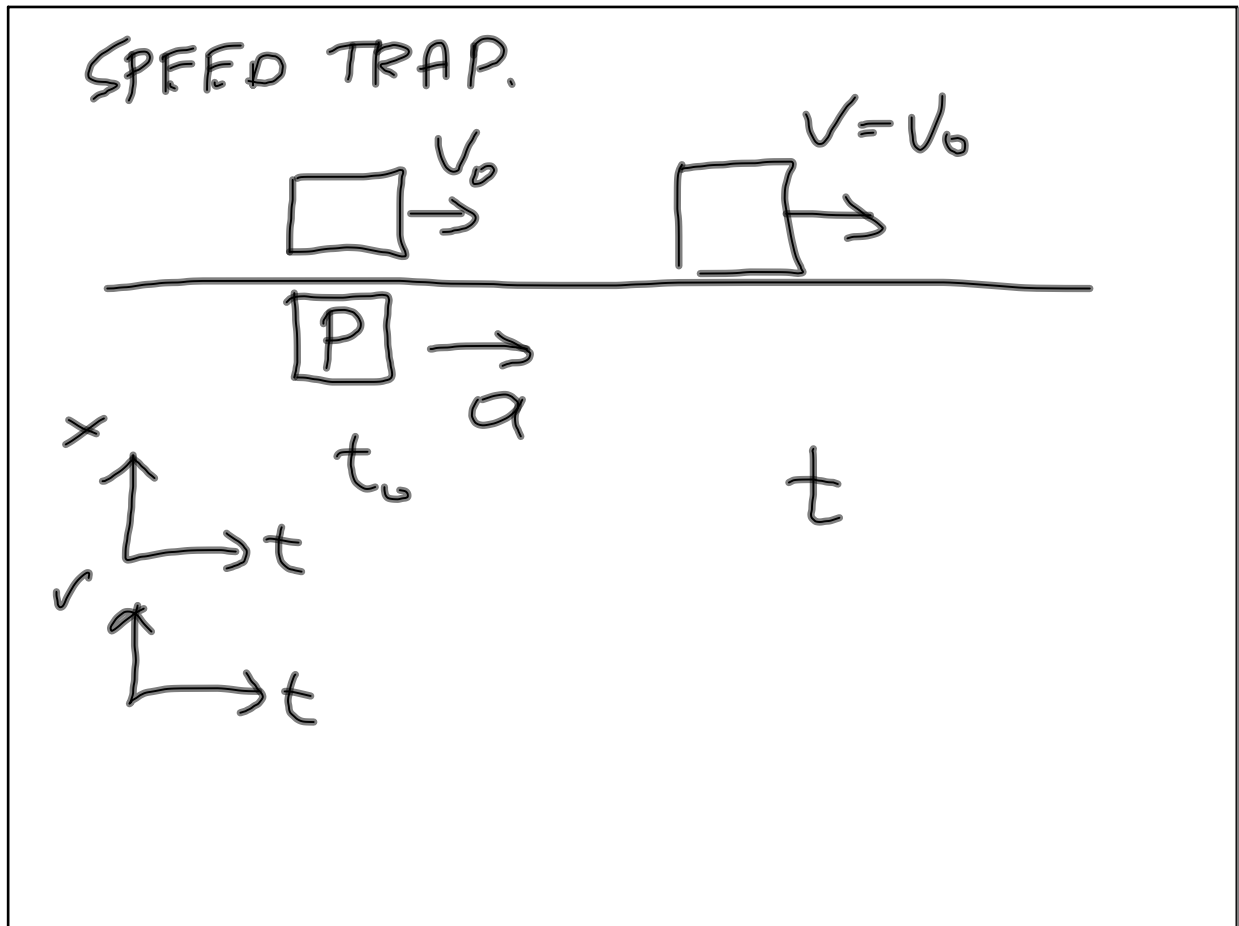c) What was the average speed for the entire trip?
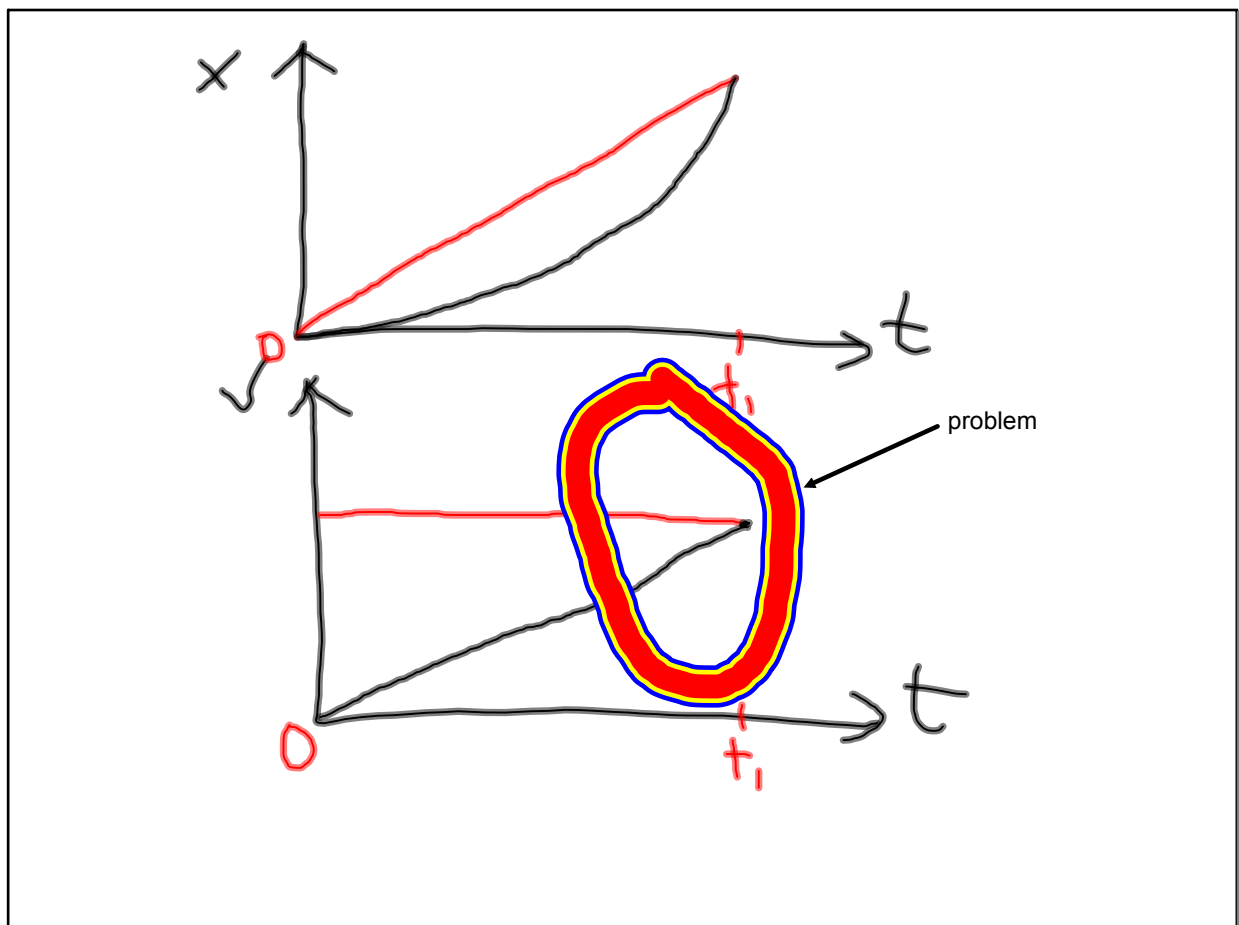
$V_o = 0$

part ①

part ②

part ③

$V = 0$

a) ①

$V_6 = 0$
$V = ?$
$a = 4\frac{m}{s}$
$t = 5\ MINS. \left(\frac{60\ s}{1\ MIN}\right) = 300\ s$
$\Delta x = ?$

1

SPEED TRAP.

V_0

$V = V_0$

$\boxed{P} \rightarrow \vec{a}$

t_0

t

x → t

a → t

Sep 30-8:17 AM

x

P

t_1

problem

O

t_1

Sep 30-8:22 AM