CAR

$x_o = 0$

$x =$

$v_o = 25 \frac{m}{s}$

$v = 25 \frac{m}{s}$

$a = 0$

$\Delta t = 4_s$

$x = x_o + v_o \Delta t + \frac{1}{2} a \Delta t^2$

$x = 0 + \left(25 \frac{m}{s}\right)(4_s) + 0$

$$\boxed{x = 100_m}$$

$$x = x_0 + v_0 \Delta t + \frac{1}{2} a \Delta t^2$$

$$x = 300_m + \bigcirc + \frac{1}{2}\left(-1.4\frac{m}{s}\right)\left(4_s\right)^2$$

$$\boxed{x = 288.8_m}$$

TRUCK

$x_0 = 300_m$

$x =$

$v_0 = \bigcirc$

$v =$

$a = -1.4\frac{m}{s}$

$\Delta t = 4_s$

CAR

$x_o = 0$

$x =$

$x = x_o + v_o \Delta t + \frac{1}{2} a \Delta t^2$

$v_o = 25 \frac{m}{s}$

$x = 0 + (25 \frac{m}{s}) \Delta t + 0$

$v = 25 \frac{m}{s}$

$a = 0$

$\Delta t =$

TRUCK

$x_o = 300_m$

$x = x_o + v_o \Delta t + \frac{1}{2} a \Delta t^2$

$x = 300_m + 0 + \frac{1}{2} (-1.4 \frac{m}{s}) \Delta t^2$

$x =$

$v_o = 0$

$v =$

Solve for position and time using the
2 equations above.
1 equation for the car & 1 equation
for the truck

$a = -1.4 \frac{m}{s}$

$\Delta t =$

$\Delta t = 9.5 s \quad x = 237 m$

$$v = v_o + a \, \Delta t$$

$$V = 0 + \left(-1.4 \frac{m}{s}\right) 9.5 \, s$$

$$\boxed{V = -13.3 \frac{m}{s}}$$

Title: #2 (5 of 5)