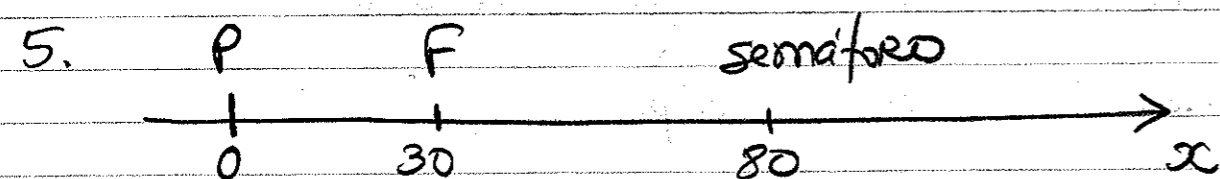


$$A = \frac{3 \times 6,9}{2} = 10,4$$

$$A = \frac{13,9 + 6,9}{2} \times 6 = 62,4$$

5p. $d = 83,4 + 72,5 + 10,4 + 62,4 = 228,7 \text{ m}$

5p. $\Delta x = 83,4 - 72,5 + 10,4 + 62,4 = 83,7 \text{ m}$



$$A = \frac{6 \times 16}{2} = 48 \quad d_{\text{Ferrari}} = 48 \text{ m} \quad 5p$$

$$A = \frac{8 \times 20}{2} = 80 \quad d_{\text{Porsche}} = 80 \text{ m} \quad 5p$$

6 Porsche parou na posição $0 + 80 = 80 \text{ m}$

6 Ferrari parou na posição $30 + 48 = 78 \text{ m}$

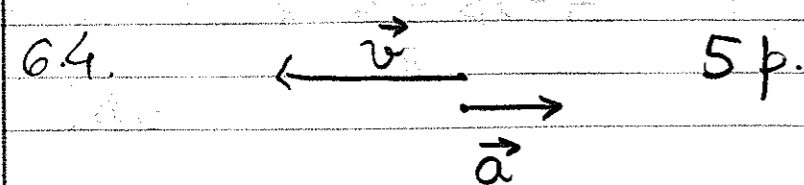
logo existiu choque entre os dois carros.

5p

6.1. 6pçãõ D 5p

6.2. 6pçãõ C 5p

6.3. $[20, 25] \text{ s}$ 5p



$$7. \quad x = -5,0 + 5,0t^2 + 10,0t \quad (\text{SI})$$

7.1. Opçãõ A

7.2. Opçãõ C

7.3. $v_0 = 10,0 \text{ m/s}$
 $a = 2 \times 5 = 10 \text{ m/s}^2$

$$v = v_0 + at$$

$$v = 10,0 + 10,0t \quad 5p$$

$$v(5) = 10,0 + 10,0 \times 5 = 60 \text{ m/s} \quad 5p$$

7.4 $x(2) = -5 + 5 \times 2^2 + 10 \times 2 = 35 \text{ m}$

$$x(4) = -5 + 5 \times 4^2 + 10 \times 4 = 115 \text{ m} \quad 5p$$

$$\Delta x = 115 - 35 = 80 \text{ m} \quad 5p.$$