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Dane:

$$n = 50$$

$$t = 60s$$

$$\Delta p = 12m$$

$$\Delta u = 1,2m$$

Znaleźć:

$$y(x, t) = ?$$

Kompromis:

$$v = \frac{n}{t}$$

$$v = \frac{\Delta}{t}$$

$$v = \frac{50}{60s} = \frac{5}{6} \text{ Hz}$$

$$v = \frac{12m}{60s} = \frac{1}{5} \frac{m}{s}$$

w ciągu jednego dnia, wszystkie
pewnie drogi $4A \Rightarrow$

$$4A = \frac{\Delta u}{n} = \frac{1,2m}{50}$$

$$4A = 0,024m$$

$$A = 0,006m$$

$$\omega = 2\pi v$$

$$\omega = 2\pi \frac{5}{6s}$$

$$y(x, t) = A \sin\left(\omega\left(t - \frac{x}{v}\right)\right)$$

$$y(x, t) = 0,006m \cdot \sin\left(2\pi \cdot \frac{5}{6s} (t - 5x)\right)$$

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