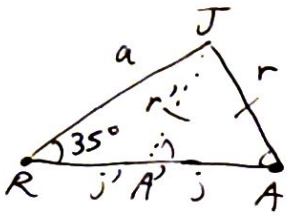
Clue 2:

Q1: $s = \frac{d}{t}$ /5



$a = 44\text{km/h} \cdot 30\text{min} \cdot \frac{1\text{h}}{60\text{min}}$

$= 22\text{km}$ ✓

$r = 64\text{km/h} \cdot 15\text{min} \cdot \frac{1\text{h}}{60\text{min}}$

$= 16\text{km}$

Bcs SSA triangle, there could be ambiguity.

Sine law: $\frac{A}{\sin A} = \frac{B}{\sin B} = \frac{C}{\sin C}$

$\frac{16}{\sin 35} = \frac{22}{\sin A} \Rightarrow \angle A = 52.06$ ✓

$\angle JA'R = 180 - 52.06 = 128°$ ✓ $\angle RJA' = 180° - 35° - 128° = 17°$

$\angle RJA = 180° - 35° - 52° = 93°$

Case 1: $\frac{RA'}{\sin 17} = \frac{16}{\sin 35} \Rightarrow RA' = 8.156 = 8$ //

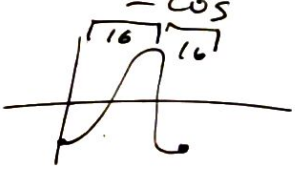
Case 2: $\frac{RA}{\sin 93} = \frac{16}{\sin 35} \Rightarrow RA = 27.857 = 28$ //

Both

Q2: /5

Min: 10% → 0.1 ✓ ; Max: 80% → 0.8 ✓

Axis: $\frac{0.1 + 0.8}{2} = 0.45$ ✓



Gen Formula: $f(x) = a\cos(K(x-c)) + d$

$K = \frac{360°}{16\text{sec} \times 2} = 11.25$ ✓

$f(x) = -0.35\cos(11.25x) + 0.45$ // ✓

Total clue 2: /10