

16.71.

Wagner Opera!

Rodrigos!

Resonant $f = 600 \text{ Hz}$.

guy!

Black Canary follow?

$$v_{\text{car}} = 30 \text{ m/s}$$

a) what f for singer?

b) reflected f ?

c) Wall is listener. $v_s = -30 \text{ m/s}$ $v_L = 0$
soud. $f_L = 600 \text{ Hz}$

$$f_L = \left[\frac{v + v_L}{v + v_s} \right] f_s = 548 \text{ Hz}$$

$$\begin{aligned} \text{b) } f_L &= \left[\frac{v + v_L}{v + v_s} \right] = \left[\frac{344 \text{ m/s} + 30 \text{ m/s}}{344 \text{ m/s}} \right] 600 \text{ Hz} \\ &= 652 \text{ Hz.} \end{aligned}$$