**Noteguide for Doppler (Videos 12K, 12L) Name**

**Video K - Introduction to Doppler**

**Receding source/observer Approaching source/observer**

**Frequency is Frequency is**

**Video L -** Feel free to skip the derivation if it does not interest you, but write down what all the variables are in the formulas:

|  |  |
| --- | --- |
| **Moving Source***f ':**f:**v:**u­s:* | **Moving Observer***f ':**f:**v:**u­o:* |

**Do Examples 1 and 3.** We will not be solving for source or observer speed, but it is extra credit on the test if you want to learn how to do it

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| **Example 1** **-** A car with a 256 Hz horn approaches you at 40.0 m/s. What frequency do you hear? (3) (use v sound = 343 m/s) | **Example 3** - You run at 8.50 m/s toward a violinist playing 660. Hz. What frequency do you hear? (Use 343 m/s as the speed of sound) |