Cassegrain reflecting telescope (Fig. 34.51b), p. 1333

- Virtual image becomes object for secondary mirror.
- This image is at \((1.3 - 0.75)\) m from secondary surface.

\[
\frac{1}{s} + \frac{1}{s'} = \frac{1}{f}
\]

\[
\frac{1}{0.55} + \frac{1}{(0.75 + 0.12)} = \frac{1}{f}
\]

\[
f = -1.50 \text{ m}
\]

So \(2f = -3.00 \text{ m}\) from negative sign it is a diverging mirror or convex.

3 pts