R-4.2

There is a point n_0 where A and B cross at that point and from that point, B is always bigger than A. To find n_0:

$$A = B$$

$$8n \log n = 2n^2$$

$$4n \log n = n^2$$

$$4 \log n = n$$

$$4 = \frac{n}{\log n}$$

$$\Rightarrow n = 16$$

At $n_0 = 16$, both A and B will be equal, so when $n_0 = 17$, B will be higher than A

$$\Rightarrow \boxed{n_0 = 17}$$