2020A3 (2D GEOMETRY, RATES)

L1: $Total\ length = Rung\ Height * \#\ of\ Rungs + Gap\ Height * \#\ of\ Gaps + Top\ Gap + Bottom\ Gap$

$$Total\ length = 30 * 258 + 270 * 257 + 125 + 125$$

$$Total\ length = 7{,}740 + 69{,}390 + 125 + 125$$

$$Total\ length = 77{,}380\ mm = 77.38\ m$$

L2: Using the total height calculated in the L1 question, Justin needs to climb 77.38 m.

$$Rate = \frac{Distance}{Time}$$

$$3\ m/min = \frac{77.38m}{Time}$$

$$25.8\ min = \frac{77.38m}{3\ m/min}$$

So, it will take Justin 25.8 minutes to complete the climb.

A One Energy technician climbing the tower ladder.