

**Exercise 2-9** Solution file from Kelton/Sadowski/Zupick, *Simulation With Arena*, 6th edition, McGraw-Hill, 2015

The drill press is down for 4 of the 20 minutes, so the proportion of downtime is obviously  $4/20 = 0.20$ , and this will be true regardless of what the interarrival and service-time input data happen to be. From the solution to Exercise 2-8, the drill press is busy all the rest of the time (16 minutes) so the proportion of time up and busy is  $16/20 = 0.80$  and the proportion of time idle but up is 0; these last two figures will, however, be dependent on what the interarrival and service-time data happen to be.