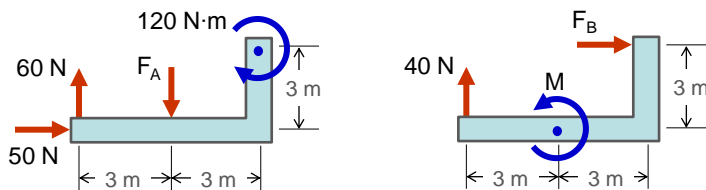
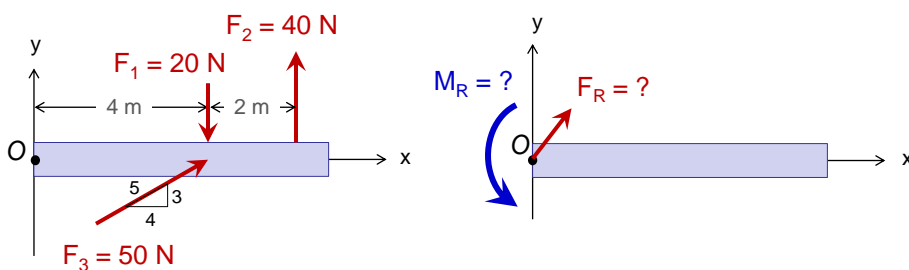


Example 1. The two force systems are equivalent. Determine the forces F_A and F_B and the couple M . Answers: 20N, 50N, -30 N-m



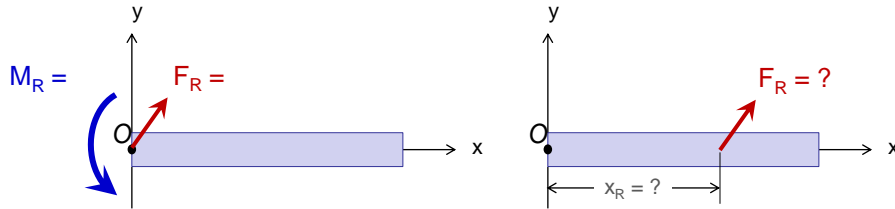
Example 2: Reduce to an Equivalent Single Force and Single Couple Moment

Replace multiple forces, couples with single force and couple at O



Example 3: Replace a force and couple with a single force

Step 2: Replace force and couple at O with equivalent single force at x_R



Example 4. Determine the single force F_R and its location P that is equivalent to the force system on the left.

