110 **1.** $I = \int_1^3 5\,dx = [5x]_1^3 = 15 - 5 = 10.$

2. $J = \int_1^3 (3x + 2)\,dx = \left[\frac{3}{2}x^2 + 2x\right]_1^3 = 19{,}5 - 3{,}5 = 16.$

3. $K = \int_1^3 (2x^2 - 5x - 1)\,dx = \left[\frac{2}{3}x^3 - \frac{5}{2}x^2 - x\right]_1^3 = (-7{,}5) - \left(-\frac{17}{6}\right) = -\frac{14}{3}.$

4. $L = \int_0^2 2x(x + 1)^2\,dx = \left[\frac{x^4}{2} + \frac{4x^3}{3} + x^2\right]_0^2 = \frac{68}{3}.$

5. $M = \int_0^{\frac{\pi}{3}} \cos(x)\,dx = [\sin(x)]_0^{\frac{\pi}{3}} = \frac{\sqrt{3}}{2}.$

6. $N = \int_0^{\frac{\pi}{2}} 3\sin(2x)\,dx = \left[\frac{-3}{2}\cos(2x)\right]_0^{\frac{\pi}{2}} = \frac{3}{2} - \left(\frac{-3}{2}\right) = 3.$