24. The currents $i_1$, $i_2$ and $i_3$ are obtained from Eqs. 28-15 through 28-17:

$$
\begin{aligned}
i_1 &= \frac{\mathcal{E}_1(R_2+R_3)-\mathcal{E}_2R_3}{R_1R_2+R_2R_3+R_1R_3} = \frac{(4.0\,\mathrm{V})(10\,\Omega+5.0\,\Omega)-(1.0\,\mathrm{V})(5.0\,\Omega)}{(10\,\Omega)(10\,\Omega)+(10\,\Omega)(5.0\,\Omega)+(10\,\Omega)(5.0\,\Omega)} \\
&= 0.275\ \mathrm{A}\ , \\
i_2 &= \frac{\mathcal{E}_1R_3-\mathcal{E}_2(R_1+R_2)}{R_1R_2+R_2R_3+R_1R_3} = \frac{(4.0\,\mathrm{V})(5.0\,\Omega)-(1.0\,\mathrm{V})(10\,\Omega+5.0\,\Omega)}{(10\,\Omega)(10\,\Omega)+(10\,\Omega)(5.0\,\Omega)+(10\,\Omega)(5.0\,\Omega)} \\
&= 0.025\ \mathrm{A}\ , \\
i_3 &= i_2 - i_1 = 0.025\,\mathrm{A} - 0.275\,\mathrm{A} = -0.250\ \mathrm{A}\ .
\end{aligned}
$$

$V_d - V_c$ can now be calculated by taking various paths. Two examples: from $V_d - i_2R_2 = V_c$ we get $V_d - V_c = i_2R_2 = (0.0250\,\mathrm{A})(10\,\Omega) = +0.25\,\mathrm{V}$; from $V_d + i_3R_3 + \mathcal{E}_2 = V_c$ we get $V_d - V_c = -i_3R_3 - \mathcal{E}_2 = -(-0.250\,\mathrm{A})(5.0\,\Omega) - 1.0\,\mathrm{V} = +0.25\,\mathrm{V}$.