Solution to Part C Question 5f

1. [$\frac{4b^{3}c^{\frac{1}{3}}}{6c^{\frac{1}{7}}b}$]-1/3  ÷ [$2b^{3}c^{\frac{-1}{7}}$]4/3

= $\left[\frac{2b^{2}c^{\frac{4}{21}}}{3}\right]^{\frac{-1}{3}}$ ÷ $\left[\frac{2b^{3}}{c^{\frac{1}{7}}}\right]^{\frac{4}{3}}$

=$ \frac{3^{\frac{1}{3}}}{2^{\frac{1}{3}}b^{\frac{2}{3}}\left(c^{\frac{4}{21}}\right)^{\frac{1}{3}}}$ ÷ $\frac{2^{\frac{4}{3}}b^{4}}{c^{\frac{4}{21}}}$

= $ \frac{3^{\frac{1}{3}}}{2^{\frac{1}{3}}b^{\frac{2}{3}}\left(c^{\frac{4}{21}}\right)^{\frac{1}{3}}}$ x $\frac{c^{\frac{4}{21}}}{2^{\frac{4}{3}}b^{4}}$

= $\frac{3^{\frac{1}{3}}c^{\frac{4}{21}}}{2^{\frac{5}{3}}b^{\frac{14}{3}}\left(c^{\frac{4}{21}}\right)^{\frac{1}{3}}}$

= $\frac{3^{\frac{1}{3}}\left(c^{\frac{4}{21}}\right)^{\frac{2}{3}}}{2^{\frac{5}{3}}b^{\frac{14}{3}}}$

= $\frac{3^{\frac{1}{3}}\left(c^{\frac{8}{21}}\right)^{\frac{1}{3}}}{2^{\frac{5}{3}}b^{\frac{14}{3}}}$

= $\left[\frac{3c^{\frac{8}{21}}}{32b^{14}}\right]^{\frac{1}{3}}$