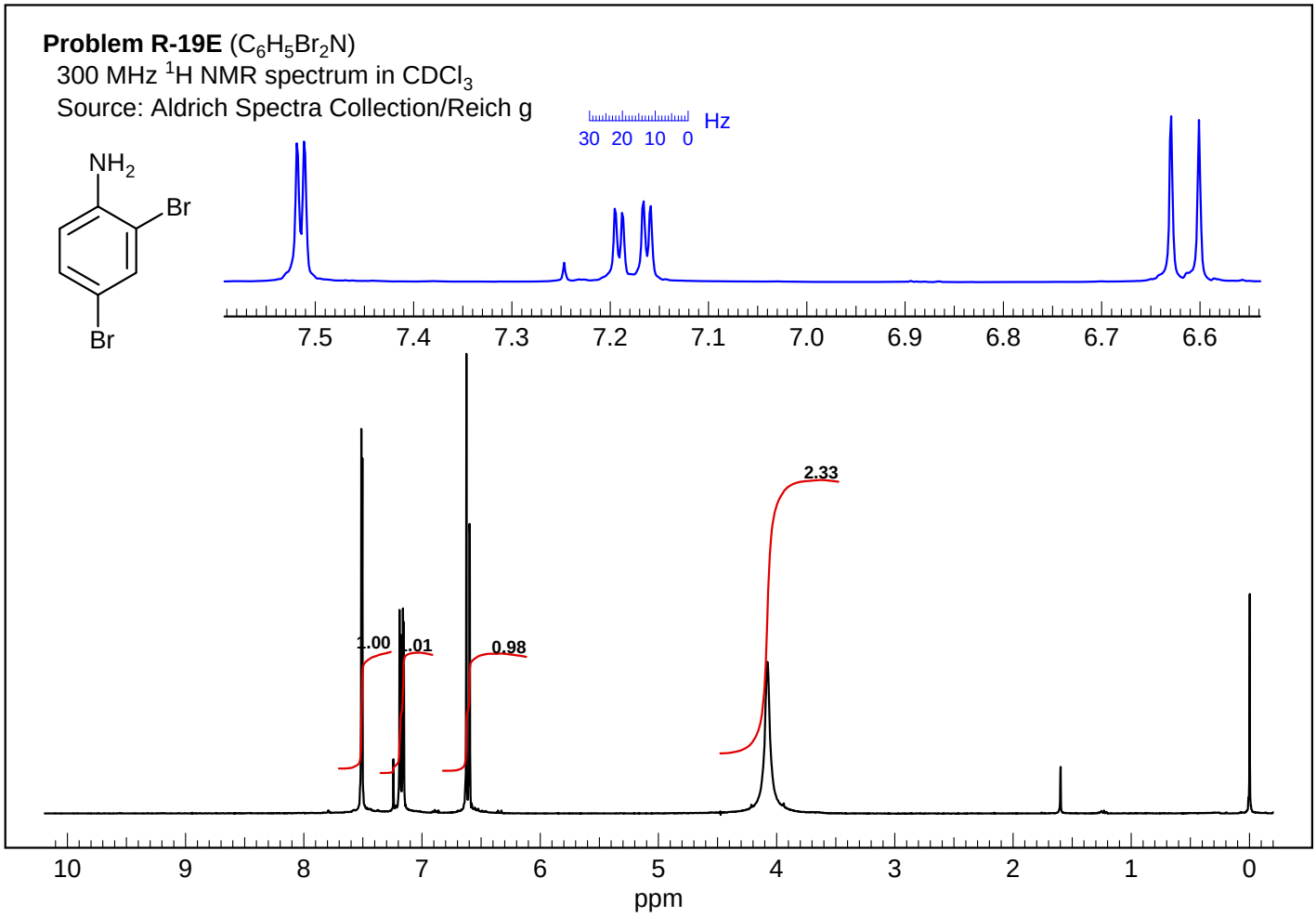
Problem R-19E ($C_6H_5Br_2N$)

300 MHz ^{1}H NMR spectrum in $CDCl_3$

Source: Aldrich Spectra Collection/Reich g

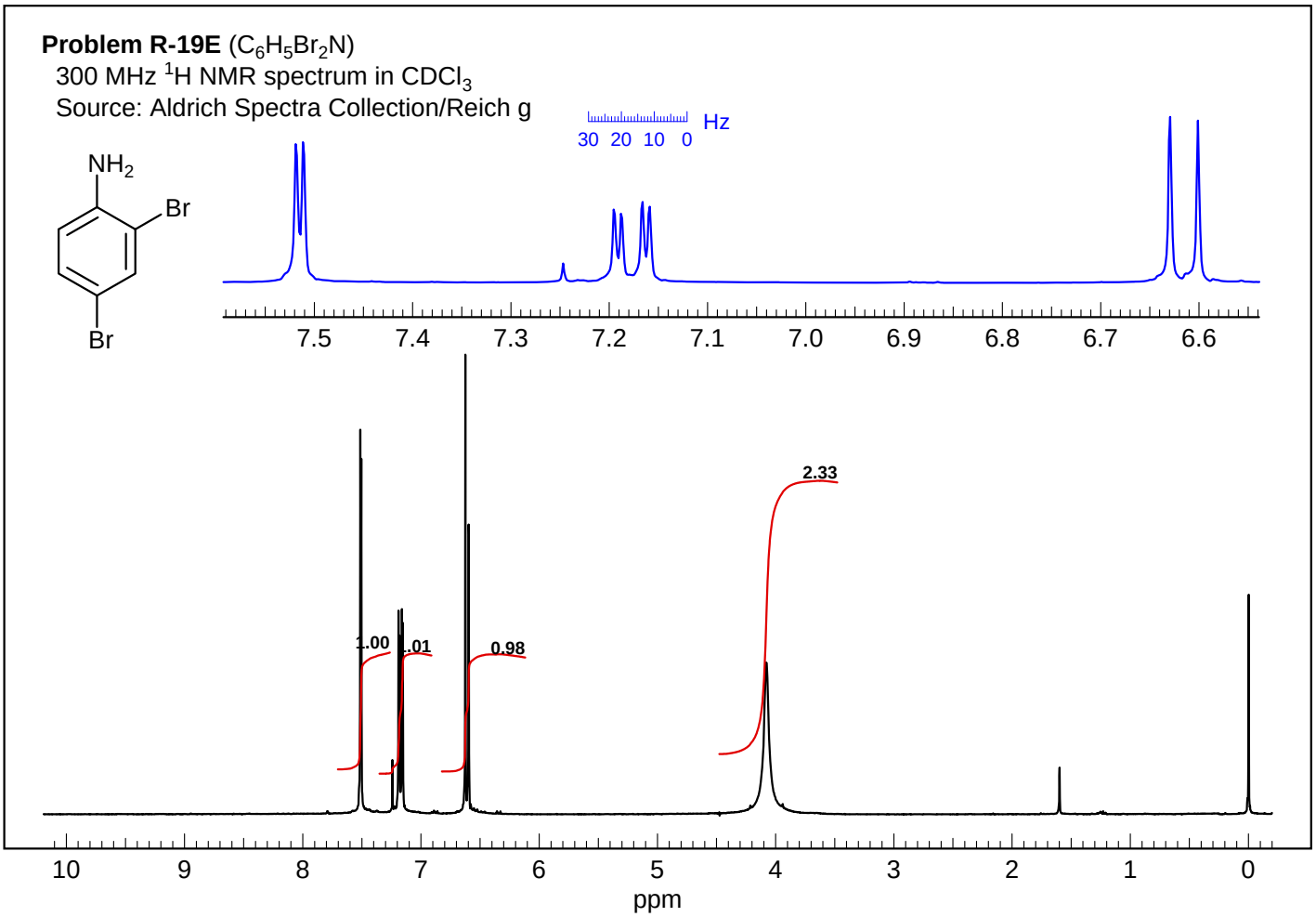


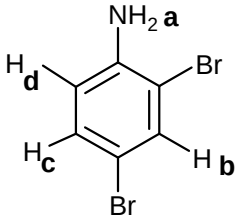
PLT pr-019-simple-proton-aromatic.plt

Name _____

ID Number _____

7. (7 pts.) The ^{1}H NMR spectrum of 2.4-dibromoaniline appears below. Assign all the absorptions in the spectrum and analyze the splitting patterns.





Fill in the blanks.

Protons **a** appear at δ_____ and are coupled to proton(s)_____.

Proton **b** appear at δ_____ and are coupled to proton(s)_____.

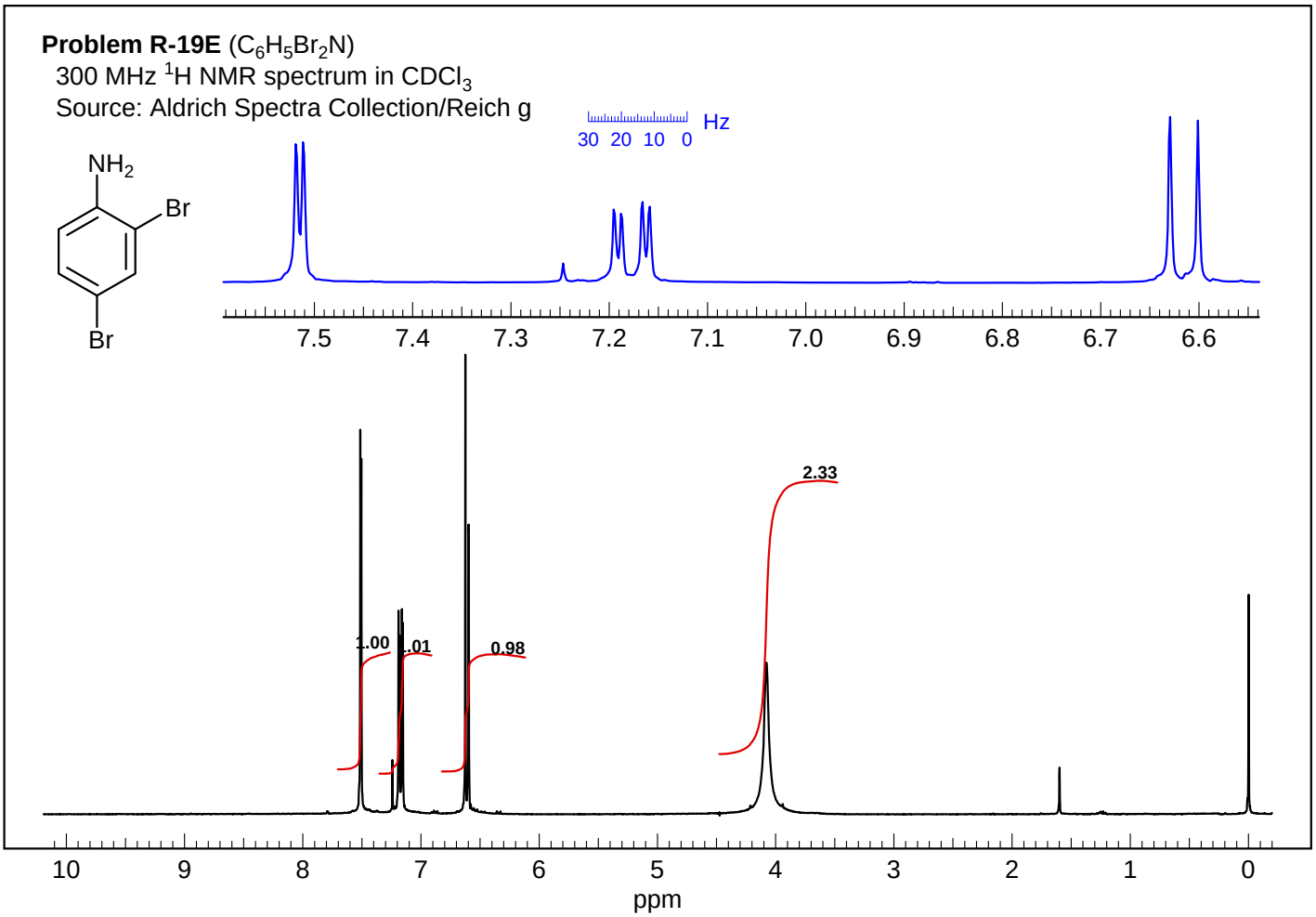
Proton **c** appear at δ_____ and are coupled to proton(s)_____.

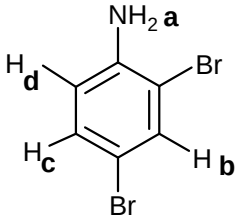
Proton **d** appear at δ_____ and are coupled to proton(s)_____.

Name _____

ID Number _____

7. (7 pts.) The ^{1}H NMR spectrum of 2.4-dibromoaniline appears below. Assign all the absorptions in the spectrum and analyze the splitting patterns.





Fill in the blanks.

Protons **a** appear at δ 4.1 and are coupled to proton(s) none.

Proton **b** appear at δ 7.52 and is coupled to proton(s) c.

Proton **c** appear at δ 7.17 and is coupled to proton(s) b and d.

Proton **d** appear at δ 6.62 and is coupled to proton(s) c.

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