8. $(-1)\cdot(a\cdot(\frac{1}{b})) = (-a)\cdot(\frac{1}{b})$ (Transitivity of eq on 7,6)

9. $(-1)\cdot(a/b) = (-a)\cdot(\frac{1}{b})$ (Transitivity of eq on 3,8)

10. $-(a/b) = (-1)\cdot(a/b)$ (Symmetry of eq 1)

11. $-(a/b) = (-a)\cdot(\frac{1}{b})$ (Transitivity of eq on 10,9)

12. $(-a)/b = (-a)\cdot(\frac{1}{b})$ (Defn. of division)

13. $(-a)\cdot(\frac{1}{b}) = (-a)/b$ (Symmetry of eq 12)

14. $-(a/b) = (-a)/b$