**14E Laws of Logs**

1. Write each of these as a single logarithm:
2. log 3 (6) + log 3 (7)
3. log 2 (15) - log 2 (3)
4. 2log 5 (3) + 3log 5 (2)
5. log 10 (3) - log 10 ($\frac{1}{2}$)
6. Write in terms of logax, logay and logaz
7. log a (x2yz3)
8. log a ($\frac{x}{y^{3}}$)
9. log a ($\frac{x\sqrt{y}}{z}$)
10. log a ($\frac{x}{a^{4}}$)
11. Solve the equation:

$$2log\_{2}x=8$$

1. Solve the equation:

$$log\_{10}4+2log\_{10}x=2$$

1. Solve the equation:

$$log\_{3}\left(x+11\right)-log\_{3}\left(x-5\right)=2$$