BIDMAS

1. Evaluate the following expression, giving your final answer in exact form

$$\frac{(2 - 3^{-1})(2 + 2^{-2})^2}{3\sqrt[3]{8}}$$

Laws of indices

2. Simplify the following expression,

$$\frac{16^{-\frac{3}{4}} \, 32^{\frac{1}{2}}}{8^{-\frac{2}{3}}}$$

ASMD of algebraic expressions

3. Multiply $2x^5 + x^3 - 1$ by, $4x^3 - x^2 - 3$

Evaluation of expressions

4. Evaluate the following, giving your final answer in exact form,

$$f(\theta, \varphi, \gamma, \tau) = \frac{2 \sin \theta - 4 \cos\gamma \, \tan\varphi}{2 + 3\tau}$$

Given $\theta = \pi$, $\gamma = 0$, $\varphi = \frac{\pi}{4}$, $\tau = 2$

Manipulate fractions

5. Simplify the following,

$$\frac{2 - 3x}{1 + 2x} - \frac{2 - 3x}{1 - 2x}$$

Rearrange formulae

6. Make t the subject of the following,

$$\frac{t - a}{t + b} = \frac{t + c}{t - d}$$