Calculus ex01   **10, Apr, 2019**

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◯5 ◯5 ◯5 ◯5 ◯5 ◯5 ◯5 ◯5   write your first and last names below.
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Questions with a ♣ may have zero, one or more right answers.

Question [`power01`]   Evaluate 6^4.

⬤ 1296   ◯ 7776   ◯ 216   ◯ 1297   ◯ 1295

Question [`power02`]   Evaluate 3^{-1}.

⬤ $\frac{1}{3}$ ◯ -3 ◯ $\frac{1}{4}$ ◯ -4 ◯ $\sqrt{3}$

Question [`power03`]   Evaluate $8^{\frac{1}{2}}$.

⬤ $2\sqrt{2}$ ◯ -8 ◯ 64 ◯ $\pm 2\sqrt{2}$ ◯ $\frac{1}{8}$

Question [`power04`] ♣   Evaluate $\left(\frac{1}{5}\right)^{-2}$.

⬤ 5^2 ⬤ $\left(\frac{1}{5^2}\right)^{-1}$ ◯ $\left(5^2\right)^{-1}$ ◯ $\frac{1}{5^2}$ ◯ $\sqrt[2]{5}$
◯ *None of these answers are correct.*

Question [`power05`]   Evaluate $2^9 \times 2^7$.

⬤ 2^{16} ◯ 2^3 ◯ 2^{63} ◯ 2^{17} ◯ 2^{62}

Question [`log01`]   Solve the equation $\log_x 36 = 2$.

⬤ 6   ◯ 2   ◯ 8   ◯ 12   ◯ 3

Question [`log02`]   Solve the equation $\log_6 x = 3$.

⬤ 6^3 ◯ 5^4 ◯ 6^2 ◯ 6^4 ◯ 5^3

Question [`log03`]   Solve the equation $\log_2(3 - x) = 4\log_{16}(x + 1)$.

⬤ 1   ◯ -2 ◯ -1 ◯ 0   ◯ 2