

☐0 ☐0 ☐0 ☐0 ☐0 ☐0 ☐0 ☐0
☐1 ☐1 ☐1 ☐1 ☐1 ☐1 ☐1 ☐1
☐2 ☐2 ☐2 ☐2 ☐2 ☐2 ☐2 ☐2
☐3 ☐3 ☐3 ☐3 ☐3 ☐3 ☐3 ☐3
☐4 ☐4 ☐4 ☐4 ☐4 ☐4 ☐4 ☐4
☐5 ☐5 ☐5 ☐5 ☐5 ☐5 ☐5 ☐5
☐6 ☐6 ☐6 ☐6 ☐6 ☐6 ☐6 ☐6
☐7 ☐7 ☐7 ☐7 ☐7 ☐7 ☐7 ☐7
☐8 ☐8 ☐8 ☐8 ☐8 ☐8 ☐8 ☐8
☐9 ☐9 ☐9 ☐9 ☐9 ☐9 ☐9 ☐9

← Please encode your student number, and write your first and last names below.

First name and last name:

Questions with a ♣ may have zero, one or more right answers.

Question 1 Evaluate 6^4 .

☐ 7776 ☐ 1297 ☐ 1295 ☐ 216 ☒ 1296

Question 2 Evaluate 3^{-1} .

☐ $\sqrt{3}$ ☒ $\frac{1}{3}$ ☐ -4 ☐ -3 ☐ $\frac{1}{4}$

Question 3 Evaluate $8^{\frac{1}{2}}$.

☒ $2\sqrt{2}$ ☐ -8 ☐ $\pm 2\sqrt{2}$ ☐ $\frac{1}{8}$ ☐ 64

Question 4 ♣ Evaluate $(\frac{1}{5})^{-2}$.

☒ $(\frac{1}{5^2})^{-1}$ ☒ 5^2 ☐ $(5^2)^{-1}$ ☐ $\sqrt[2]{5}$ ☐ $\frac{1}{5^2}$
☐ None of these answers are correct.

Question 5 Evaluate $2^9 \times 2^7$.

☐ 2^3 ☒ 2^{16} ☐ 2^{63} ☐ 2^{62} ☐ 2^{17}

Question 6 Solve the equation $\log_x 36 = 2$.

☐ 12 ☐ 8 ☐ 2 ☒ 6 ☐ 3

Question 7 Solve the equation $\log_6 x = 3$.

☐ 5^3 ☒ 6^3 ☐ 6^4 ☐ 5^4 ☐ 6^2

Question 8 Solve the equation $\log_2(3-x) = 4\log_{16}(x+1)$.

☐ 0 ☐ 2 ☐ -2 ☐ -1 ☒ 1