

YOUR NAME: _____

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Read each problem **very carefully** before starting to solve it. Each problem is worth 5 points. It is necessary to show **all** your work. Correct answers without explanations are worth 0 points. GOOD LUCK!!

1. (a) Evaluate $\left(\frac{81}{16}\right)^{-3/4}$

(b) Operate and simplify, leaving answers without negative exponents:

$$(xy^{1/3})^2(x^2y^{-3})^{-1/2} =$$

2. Operate and simplify:

(a) $\sqrt[3]{-16x^4} + 5x\sqrt[3]{54x} =$

(b) $\frac{3\sqrt{x}}{\sqrt{x} + \sqrt{7}} =$