

Skill Based Take Home Assignment Due on Monday March 16.

Name.....

If you worked with others, please list their names here:

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Skill based problems: Make sure you show each step in your problem solving process.

1. Simplify: $2\sqrt{50} + 5\sqrt{8} - 3\sqrt{72}$

2. Simplify: $(3\sqrt{5} - 2\sqrt{7})^2$

3. a) Solve and express solution in a set: $\sqrt{3x + 4} - x = -2$

3b) Solve and express solution in a set: $3\sqrt[3]{x-2} = \sqrt[3]{17x-14}$

4. Simplify: $\left(\frac{x^{3/4} y^{-3}}{x^{1/2} y^2}\right)^4$

5. By selecting values of a and b, show that

$$(a^3 + b^3)^{1/3} \text{ is not equal to } a + b$$

6. Find the imaginary part of $\frac{5-i}{3+2i}$