How do you want me to simplify this?

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My (admittedly perverse) answer is that "to simplify" means to write an equivalent expression that the instructor/marker likely wants or expects as an answer. It is an exercise in mind-reading.

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Quick guide to simplifying

In the following, X matches any subexpression of the expression we are simplifying. The notation $X \to Y$ means to replace the subexpression X by Y.

(a) Reduce all rational numbers to lowest terms.

(b) All arithmetic sums, products, and exponents of numbers should be done.

(c) All common additive and multiplicative terms should be combined.

(d) Apply identities $1 \times X \to X, 0X \to 0, 1^X \to 1$ and $X^1 \to X$.

(e) Provided x is nonzero, apply identities $\frac{X}{X} \to 1$ and $X^0 = 1$.

(f) Provided X is nonnegative, apply the identity $(X^a)^b \to X^{ab}$.

(g) Use the well known values of the trigonometric functions at the integer multiplies of $\pi/6$ and $\pi/4$ to simplify these values.

(h) For any odd function O, replace $O(x) + O(-x)$ by zero. For any even function E, replace $E(x) - E(-x)$ by zero.

(i) Use the identities $\log(10^X) = X$ and $\ln(e^X) = X$ to replace the left side by the right side.

(j) For a positive integer n, replace $\frac{1}{\sqrt{n}}$ by $\frac{\sqrt{n}}{n}$.

(k) For a positive integers m and n, replace $\sqrt{mn^2}$ by $n\sqrt{m}$.

Examples:

Rule	Replace	By
a	$1/2+1/3$	$5/6$