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Show that the equation $2xa^{2}-\sqrt{by}+\left(2+\sqrt{a}\right)z=b^{2}$ is linear.

1) x means x^{1} and z means z^{1}, so this equation is linear in these variables.

2) The 2, a^{2} , $-\sqrt{by}$, $\left(2+\sqrt{a}\right)$ and b^{2} are just fancy ways of writing constants.

2a) For example, you could set a=1, b=1, y=1, you'd have a linear equation.

$$2x(1)^{2}-\sqrt{(1)(1)}+(2+\sqrt{1})z=1^{2}$$
$$2x-1+3z=1$$
$$2x+3z=2$$