# Grow Your Brain Handout

① Explain the meaning of the title "You can grow your brain"

② What evidence is provided in this article that you can grow your brain and become smarter? Do you find this evidence convincing? Explain

③ We often hear people say, "I can't do math. I am not a math person." Use the ideas in this article to respond.

① You can workout your brain like you workout a muscle. The more you use it, the more it grows.

② The neurons in our brain have connections of varring strengths and that is our "knowledge" and the more we use something the stronger they become. And if we don't use them, they get weaker. I do find this convincing.

because I can relate this to machine learning and neural networks, I am learning about this on my free time, and this is similar to how they learn.

③ My response would be that if you don't do something for a long time or just start, your brain isn't use' to it so it won't be making those connections quickly. But if you study math and practice it, your brain will start making those connections quicker

Homework Handout 1 (True of False)

① $\frac{2}{a} + \frac{3}{b} = \frac{3}{a+b}$ False: $\frac{1}{a+b} + \frac{2}{a+b} = \frac{3}{a+b}$

② $\frac{a+b}{c+d} = \frac{a}{c} + \frac{b}{d}$ False: $\frac{a+b}{c+d} = \frac{a}{c+d} + \frac{b}{c+d}$

③ $\sqrt{a^2 - b^2} = a - b$ False: $\sqrt{(a-b)^2} = a - b$

④ $(a-b)^2 = a^2 - b^2$ False: $(a-b)^2 = a^2 - 2ab + b^2$

⑤ $\frac{a}{b} = \frac{a^2}{b^2}$ False: $\frac{a}{b} \cdot \frac{a}{b} = \frac{a^2}{b^2}$

⑥ $\sqrt{a+b} = \sqrt{a} + \sqrt{b}$ True

⑦ $\frac{a+b}{b} = a$ False: $\frac{a \cdot b}{b} = a$

⑧ $a(bc) = (ab)(ac)$ False: $a^2(bc) = (ab)(ac)$

⑨ $\frac{1}{3}(-6)^3 = -2^3$ False: $\frac{1}{3}(-6)^3 = -3^3$

⑩ If $x(x-2) = 24$, either $x = 24$ or
$$(x-2) = 24$$
False: $x(x-2) = 0$, either $x = 0$ or
$$(x-2) = 0$$