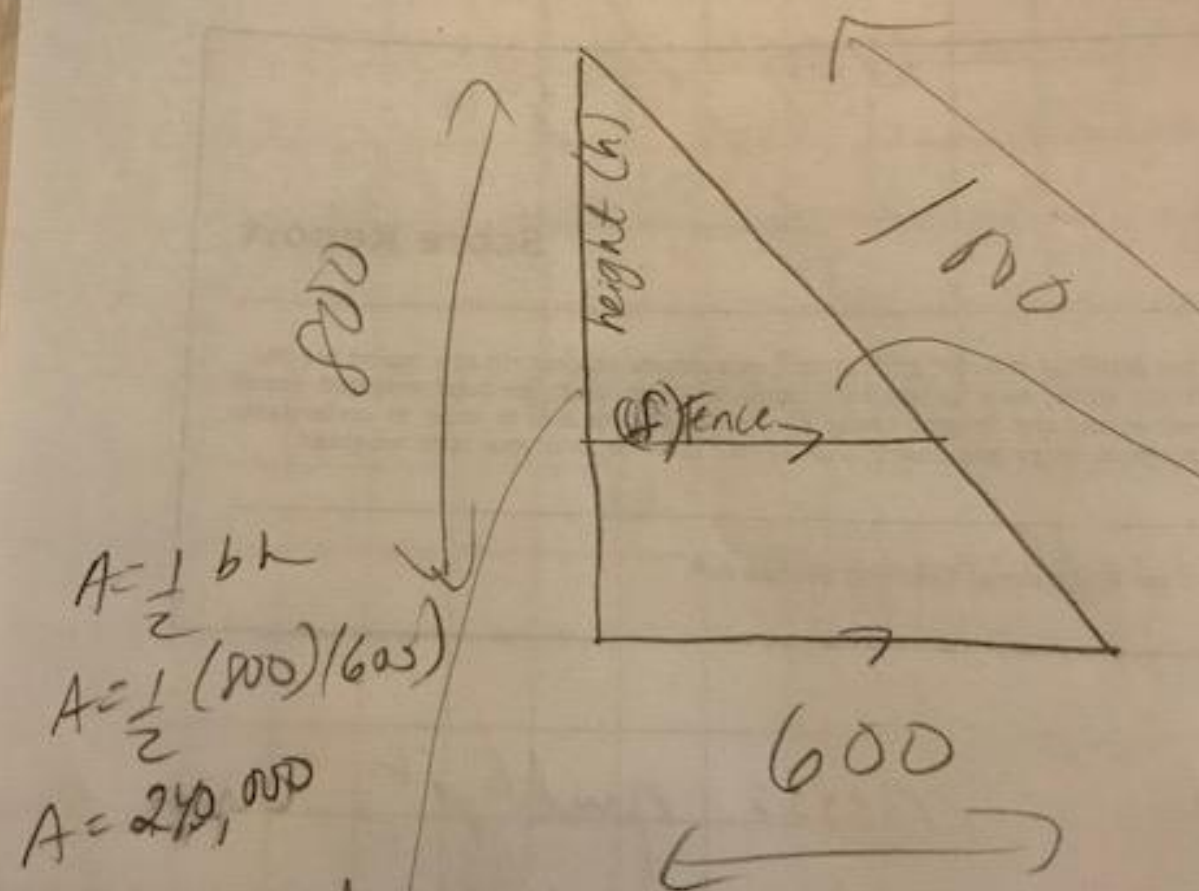


Geometry Mock #3 Answers

- 1.) cone, cylinder cylinder, prism *all four
- 2.) 130
- 3.) 12,891.6, 12,904.63, or 13,028.8 or close – all depends on how you round
- 4.) 323,356 or close
- 5.) A
- 6.) 191 or close
- 7.) A
- 8.) 371 and 20
- 9.) 2,900,904 or close
- 10.) B *yes because it birds per cubic yard so $134 / 540$ since per means divide so yes 0.25
- 11.) 240
- 12.) D
- 13.) the length of the fence is 424.264 *see pictures at the end of this!!!
- 14.) C
- 15.) 2,777,892 or close (between 2.7 and 2.8 million) and .000001449
- 16.) B

*SEE ALL THE PICTURES OF MY WORK ON THE NEXT PAGES FOR #13!!!!!!



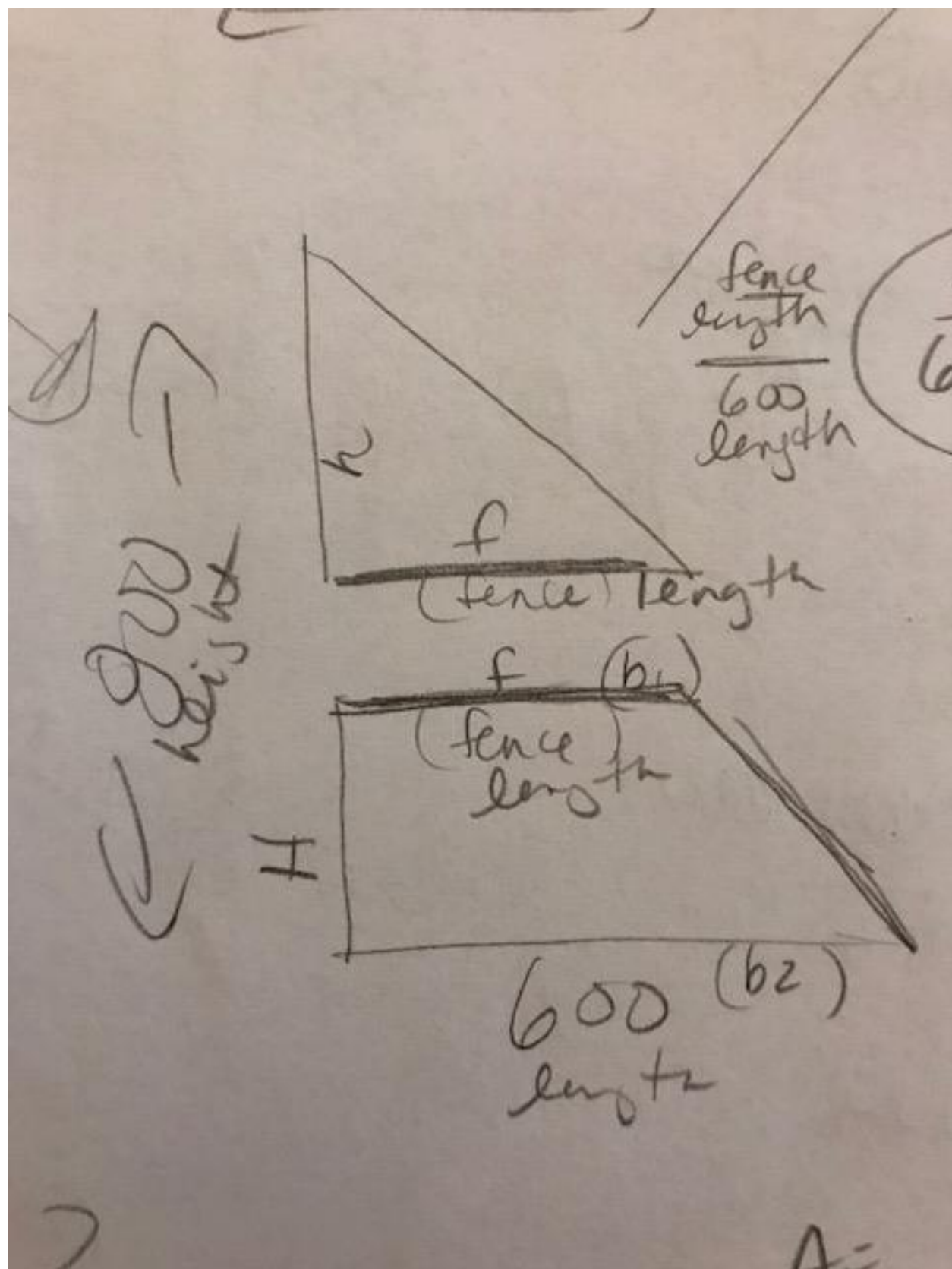
$$A = \frac{1}{2}bh$$

$$A = \frac{1}{2}(800)(600)$$

$$A = 240,000$$

Each section needs to be 120,000

fence
length



h = height of triangle
 f = fence

Area of small triangle

$$\frac{1}{2}bh$$

$$\text{or } \frac{1}{2}hf$$

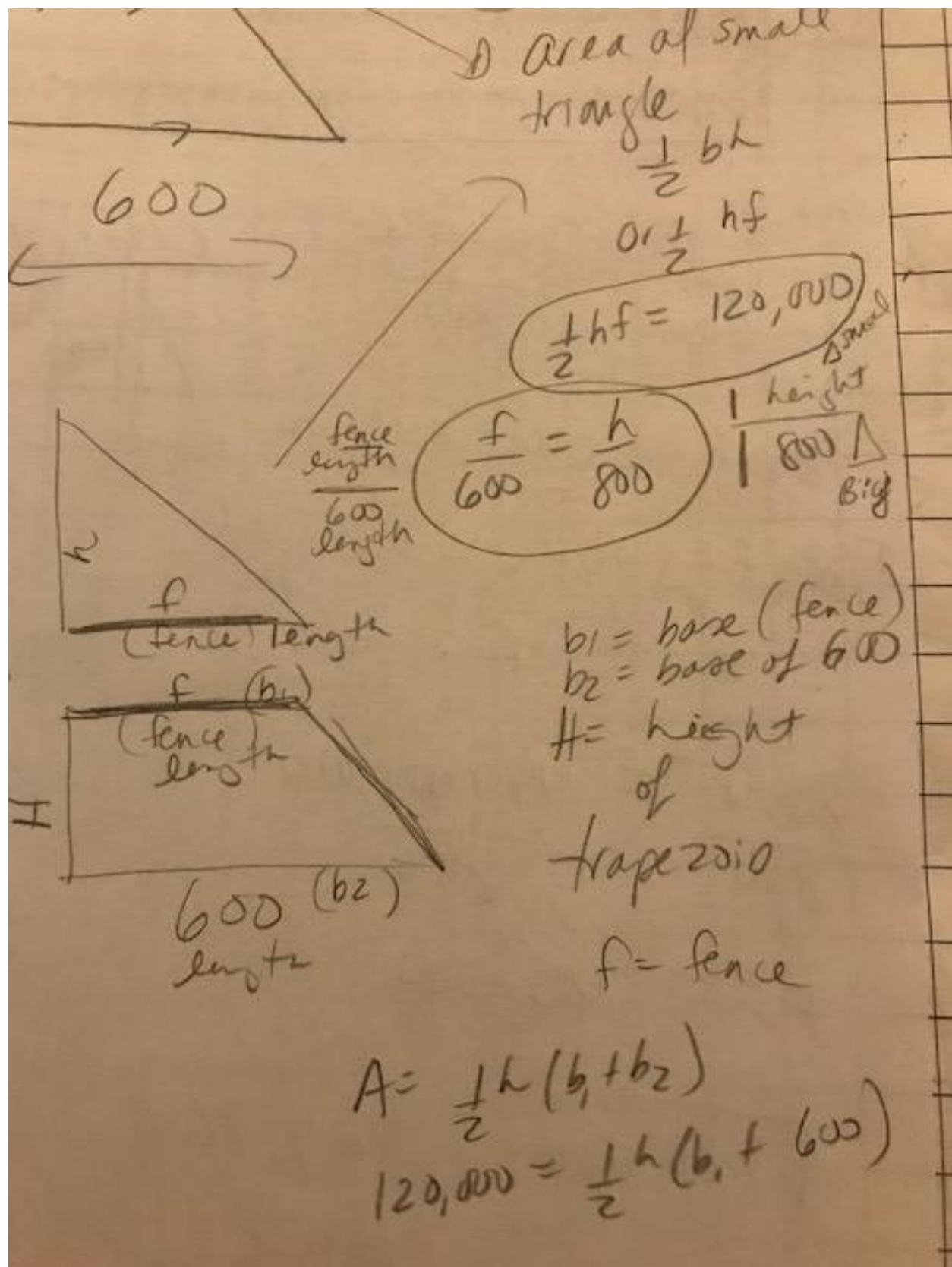
$$\frac{1}{2}hf = 120,000$$

Small

$\frac{\text{fence length}}{600}$
 $\frac{\text{length}}{\text{length}}$

$$\frac{f}{600} = \frac{h}{800}$$

$\frac{1 \text{ height}}{800}$
Big



$$\left(\frac{1}{2} hf = 120,000 \right)^2$$

$$\frac{hf}{f} = \frac{240,000}{f}$$

$$h = \frac{240,000}{f}$$

Substitute For h ✓

$$\frac{f}{60} = \frac{240,000/f}{800}$$

$$\frac{f}{600} = \frac{240,000/f}{800}$$

Cross

$$800f = 600 \cdot \frac{240,000}{f}$$

$$F(800f = \frac{144,000,000}{f}) \quad f$$

$$\frac{800f^2}{800} = \frac{144,000,000}{800}$$

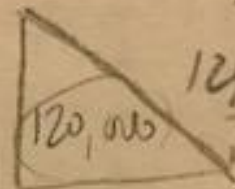
$$f^2 = 180,000$$

$$\sqrt{180,000} = 424.264$$

Fence

Now ✓

565.686



424,264

$$A = \frac{1}{2} b h$$

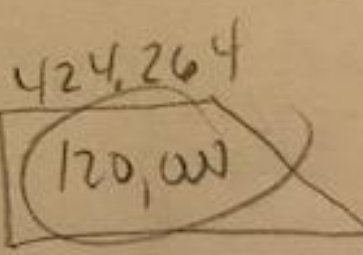
$$120,000 = \frac{1}{2} (424,264) h$$

$$\frac{120,000 \times 2}{424,264} = h$$

$$h = 565.686$$

$$\begin{array}{r} 800 \\ - 565.686 \\ \hline \end{array}$$

234,314



600

$$A = \frac{1}{2} h (b_1 + b_2)$$

$$A = \frac{1}{2} (234,314) (424,264 + 600)$$

$$A = (117,157) (1024,864)$$

$$\approx 120,000$$