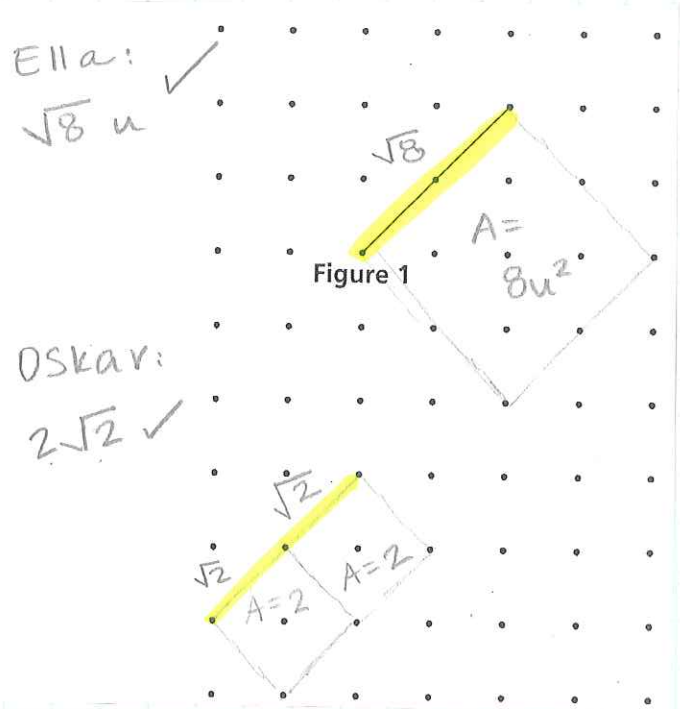
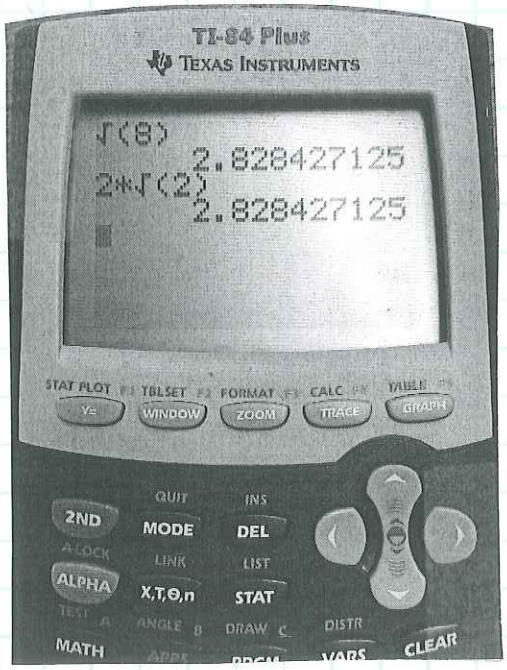
2.4 (B) p. 26

1. Ella and Oskar are both correct.

· Geometric Proof:



· Calculator Check:



· Simplifying Square Roots Proof (challenge: this method WILL NOT be on the Quiz!

$2\sqrt{2} = \sqrt{8}$

$\sqrt{4 \cdot 2}$

$\sqrt{4} \cdot \sqrt{2}$

$2\sqrt{2} = 2\sqrt{2}$ ✓

2. <u>Way #1</u>

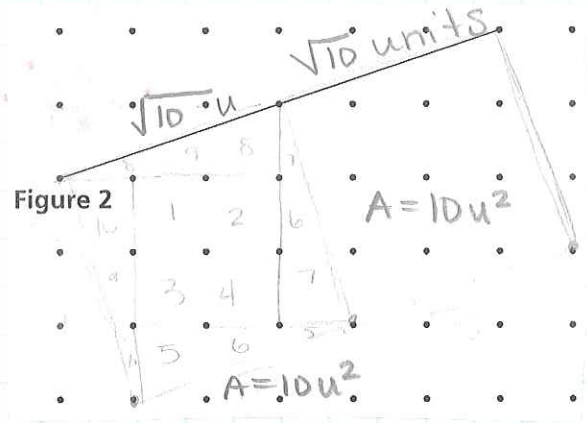
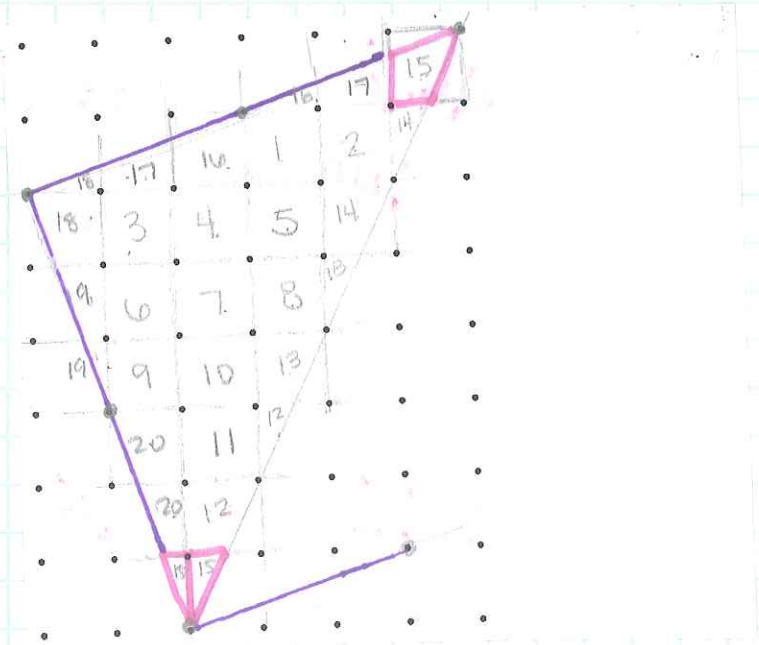


Figure 2

$\sqrt{10} + \sqrt{10} = 2\sqrt{10}$

<u>Way #2</u>:



· When I drew a square off of the whole line segment, the square did not fit on my grid.

So, I found that <u>half</u> of the square was $20u^2$, so the whole square must be $2(20)u^2$ or $40u^2$.

Since $\sqrt{\text{Area}}$ = side length:

Area = 40
side = ?

$\sqrt{40}$ = side length