

Name:

Date:

1. A

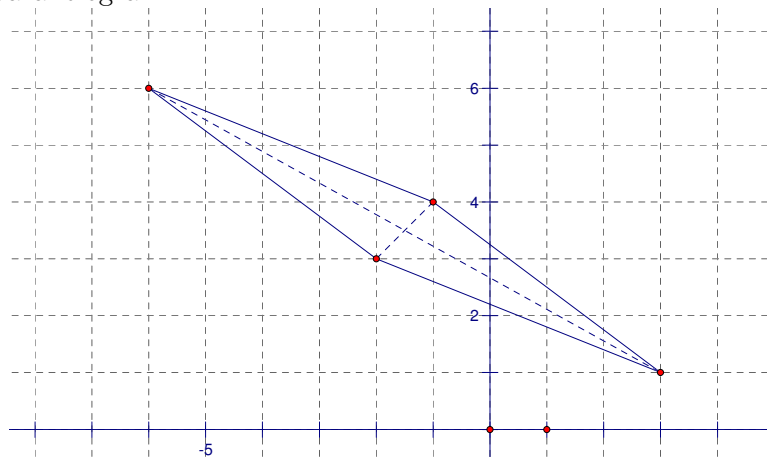
2. A

3. A

4. A

5. A

6. Here is the parallelogram.



The slope formula is $\frac{y_2 - y_1}{x_2 - x_1}$. If two of our vertices are $(-2, 3)$ and $(-1, 4)$, then the slope of the line connecting them is $\frac{4-3}{-1+2} = 1$. C. Also, we have $(3, 1)$ and $(-6, 6)$, so the slope is $\frac{6-1}{-6-3} = -\frac{5}{9}$. A.

7. A

8. Let's count how many factors of 5 are in the numbers 1-100. $\lfloor \frac{100}{5} \rfloor = 20$. $\lfloor \frac{20}{5} \rfloor = 4$. So there are $20 + 4 = 24$ factors of 5 in the numbers 1-100, so we can divide $100!$ by 5^{24} . A

9. A

10. We know $\sqrt{8} = 2\sqrt{2} = \sqrt{2} + \sqrt{2}$. So $a = 2, b = 2$, and $a + b = 4$. E