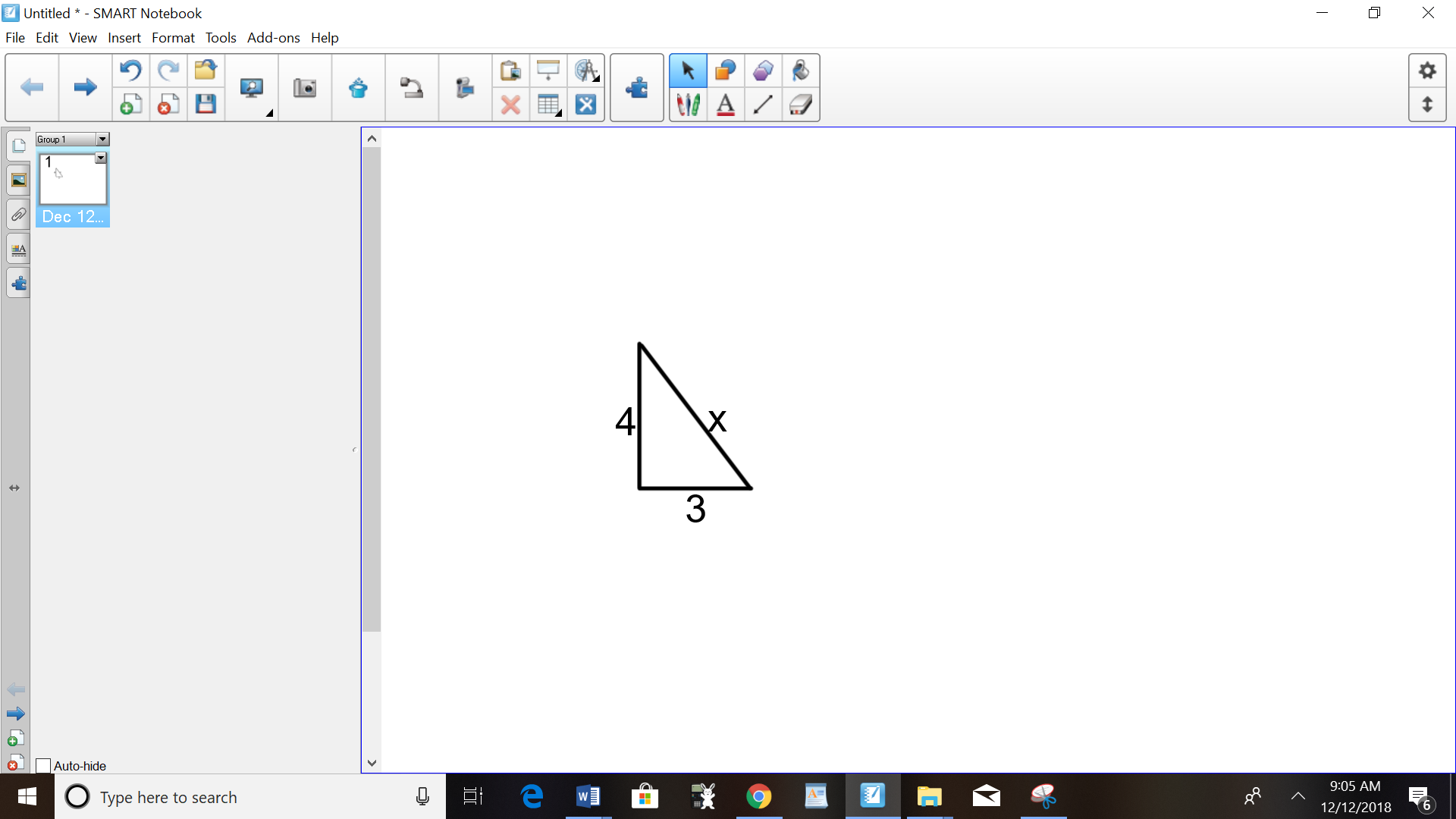
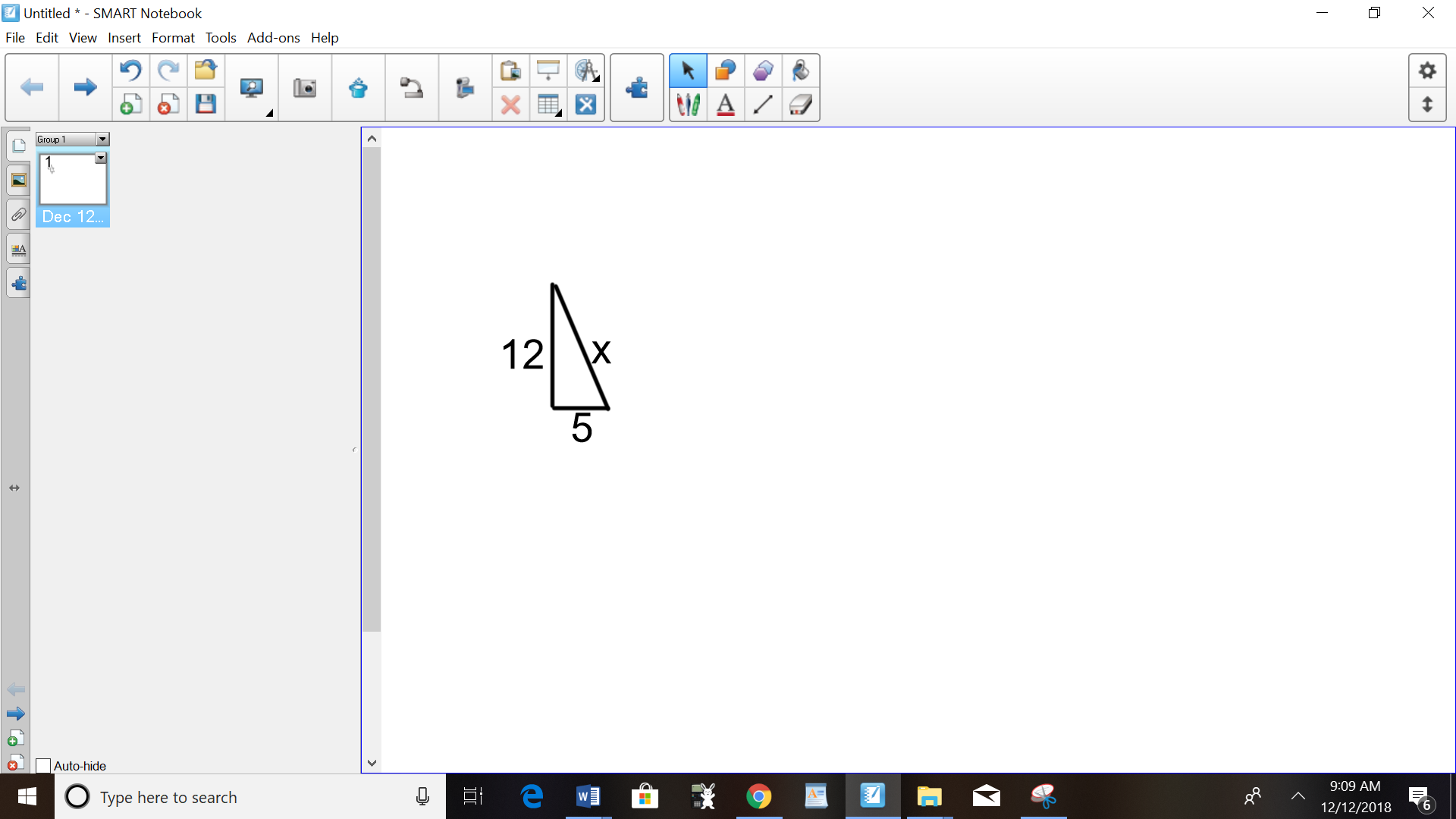
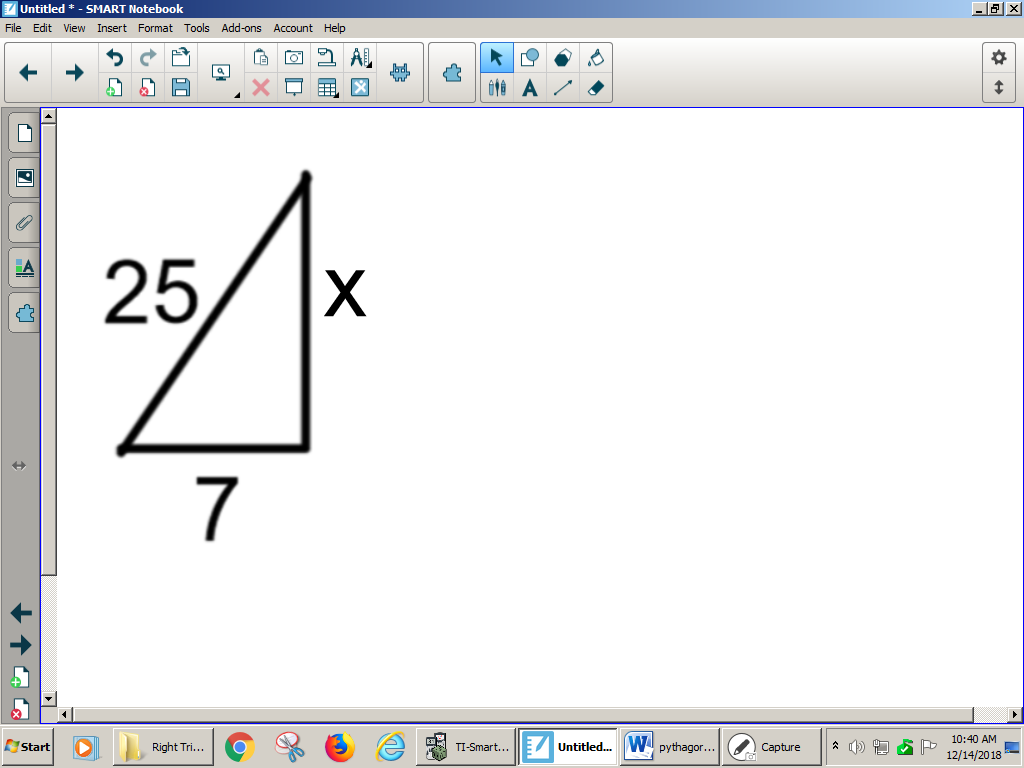
Name \_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_

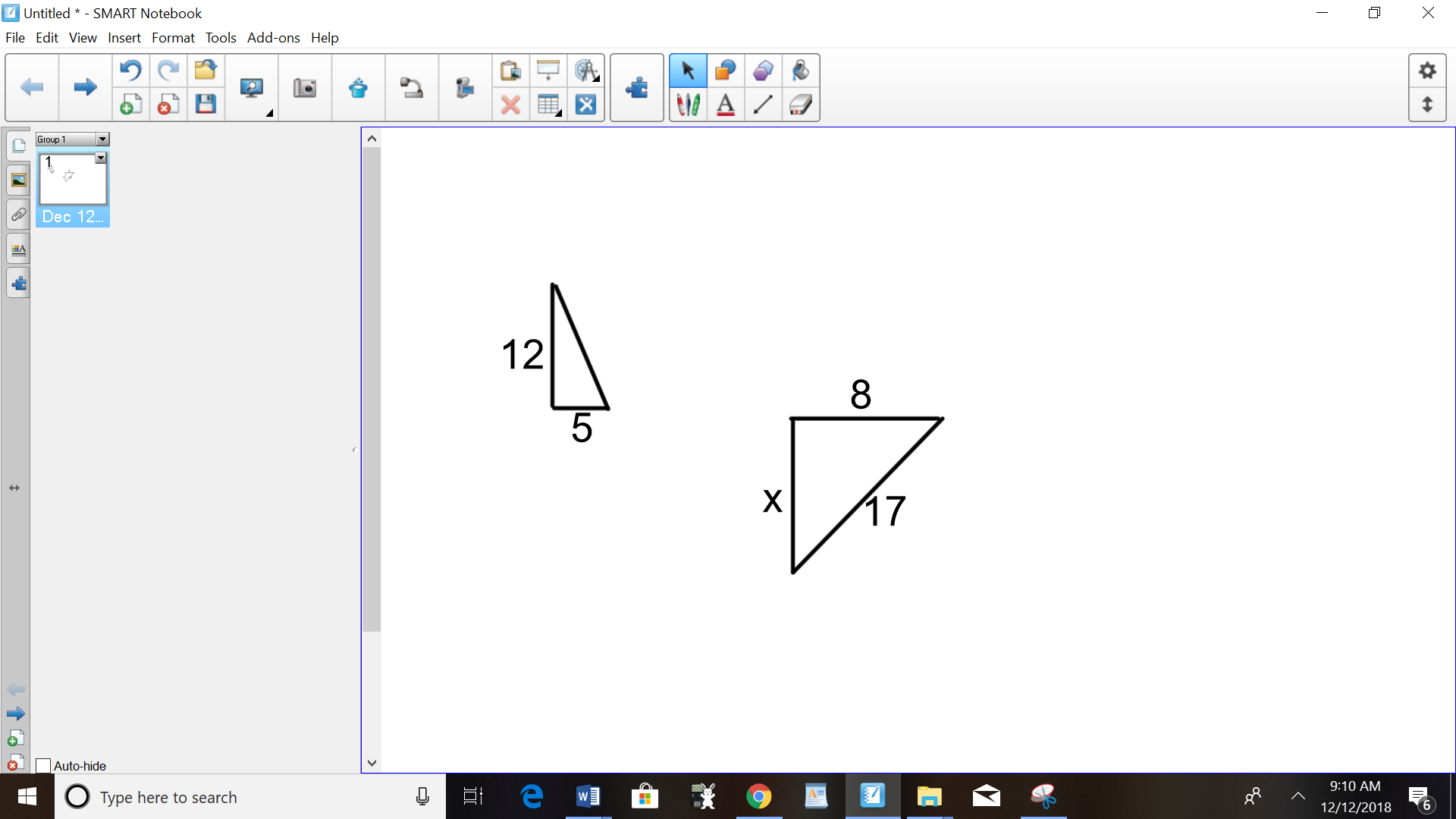
Mr. Schlansky Geometry

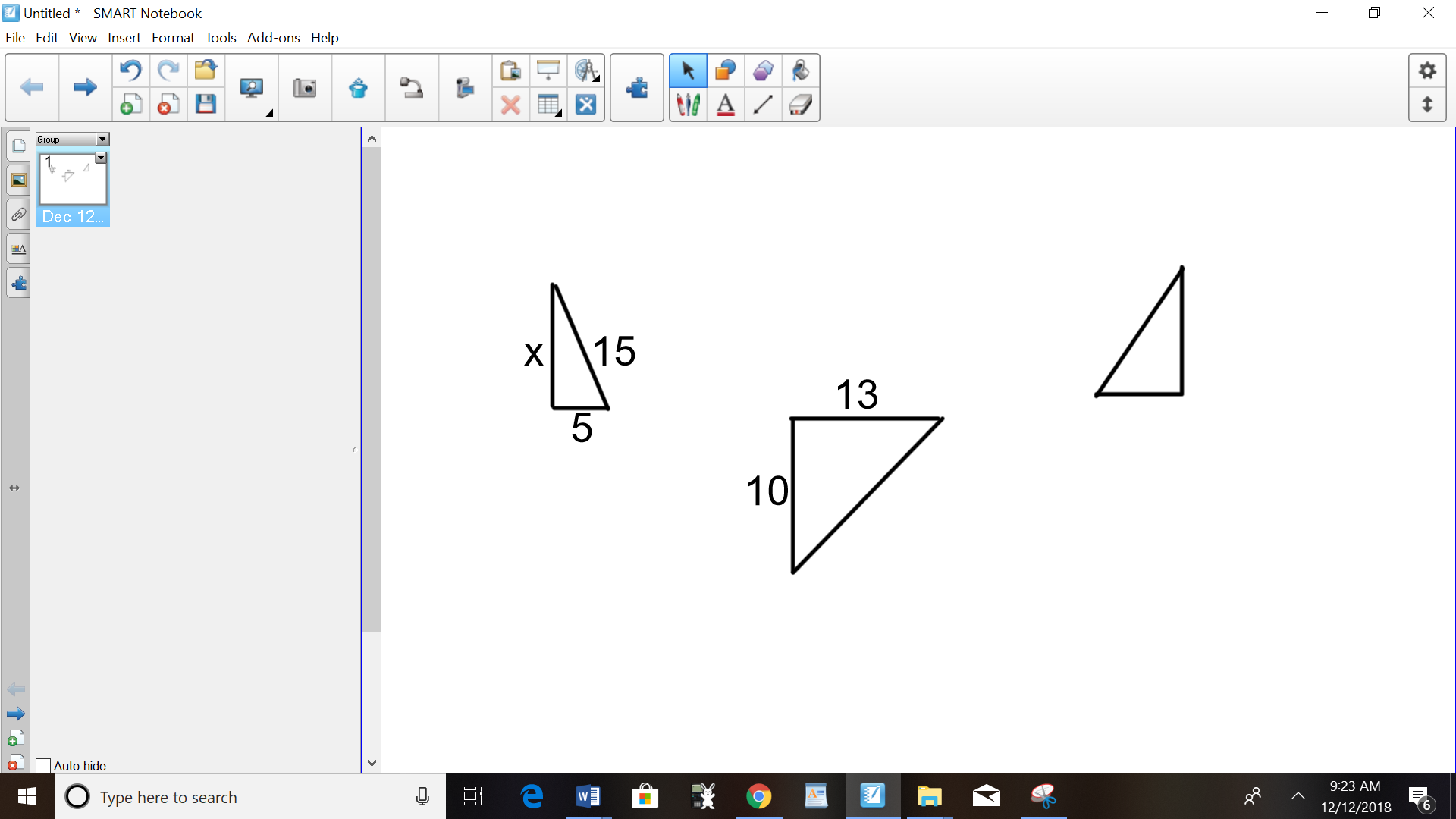
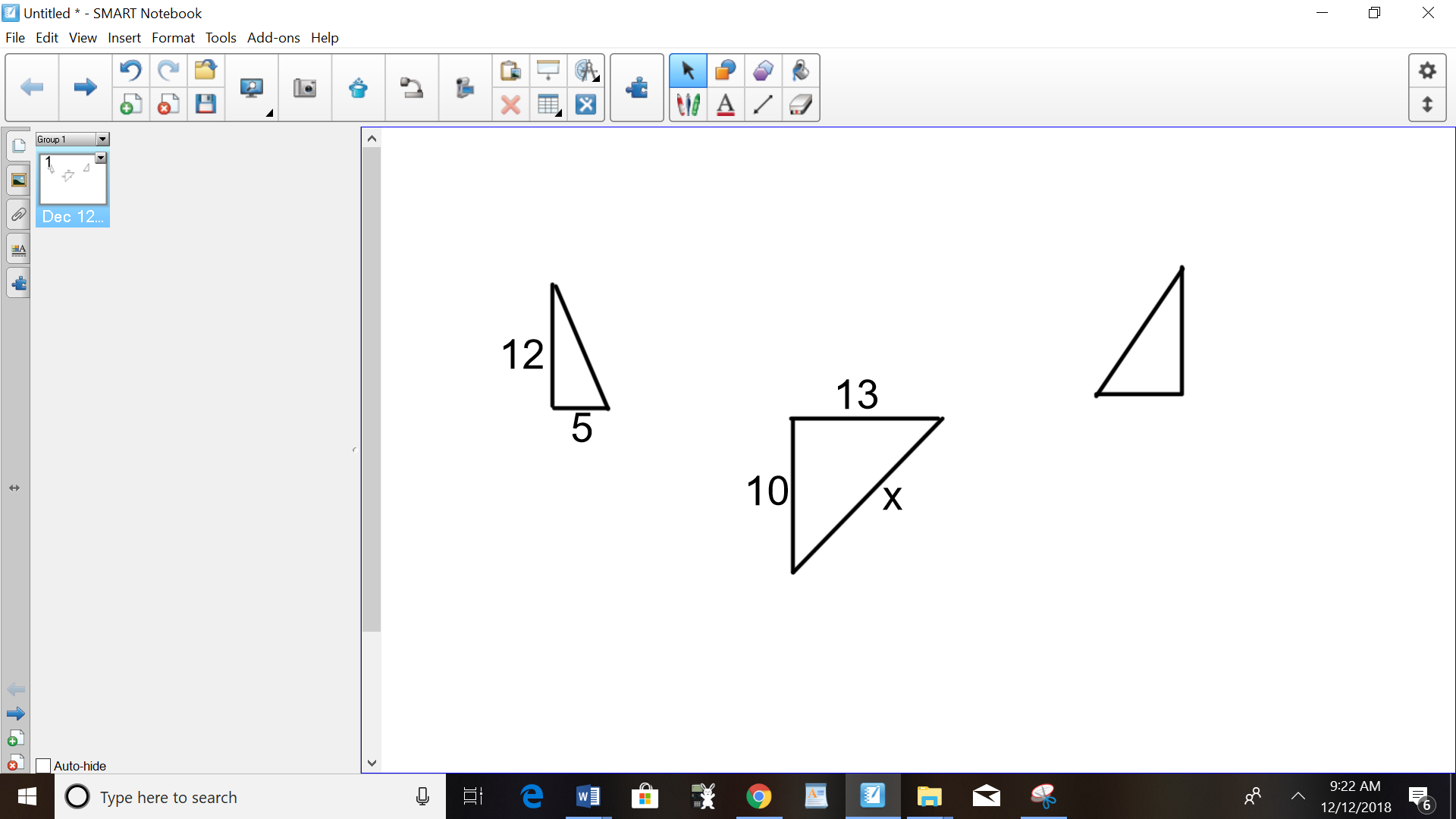
***Pythagorean Theorem***

**Find the missing side of each right triangle rounding to the nearest tenth if necessary**

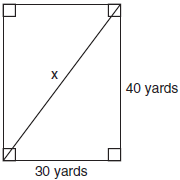
1.  2.



3. 4.



5. 6.

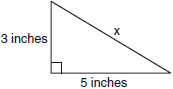
 7. Tanya runs diagonally across a rectangular field that has a length of 40 yards and a width of 30 yards, as shown in the diagram below.

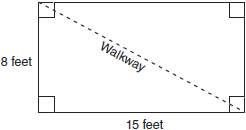
What is the length of the diagonal, in yards, that Tanya runs?

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | 50 | 3) | 70 |
| 2) | 60 | 4) | 80 |

8. What is the value of *x*, in inches, in the right triangle below?

|  |  |  |  |
| --- | --- | --- | --- |
| 1) |  | 3) |  |
| 2) | 8 | 4) | 4 |

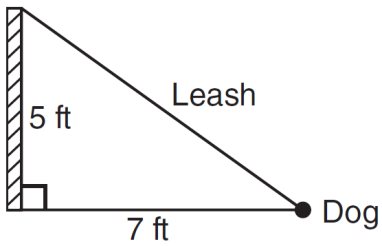


 9. Nancy’s rectangular garden is represented in the diagram below.

If a diagonal walkway crosses her garden, what is its length, in feet?

|  |  |  |  |
| --- | --- | --- | --- |
| 1) | 17 | 3) |  |
| 2) | 22 | 4) |  |

10. The end of a dog's leash is attached to the top of a 5-foot-tall fence post, as shown in the diagram below. The dog is 7 feet away from the base of the fence post.



How long is the leash, to the *nearest tenth of a foot*?

|  |  |
| --- | --- |
| 1) | 4.9 |
| 2) | 8.6 |
| 3) | 9.0 |
| 4) | 12.0 |