

# Lesson 0.5

# Angle Classifications

Target: I can write my own definitions for the following list of words with no counterexamples.

Exercise 1: widgets and squares

Vocab:

- Counterexample: something that fits your definition, but isn't what you're trying to define. It means your definition must get more specific.

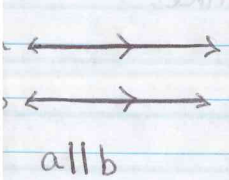
How to write a good definition...

1. Classify your term. (What is it?)
2. Differentiate it. (How does it differ from others in its class?)
3. Test it. (Does it have any counterexamples?)

Exercise 2: DAFFYNITION Game

Practice defining words together

## 1. Parallel Lines:



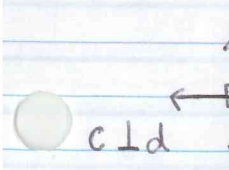
- what you need to know...
- if two lines have the same # of arrow marks, they are parallel
- the symbol  $\parallel$  means "is parallel to"
- write a definition:

parallel lines are lines ~~that~~ in the same plane that never meet

classify

differentiate

## 2. Perpendicular Lines:



- what you need to know
- small square in corner of angle means it is  $90^\circ$
- the symbol  $\perp$  means "is perpendicular to"
- write a definition:

perpendicular lines are lines that meet at  $90^\circ$  angles

classify

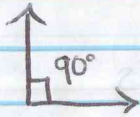
differentiate



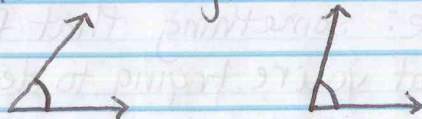


Your turn: write a good definition and show examples.

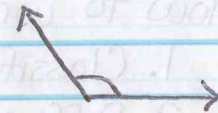
3. Right Angle: An angle that measures  $90^\circ$



4. Acute Angle: An angle that measures less than  $90^\circ$



5. Obtuse Angle: an angle that measures more than  $90^\circ$  but less than  $180^\circ$

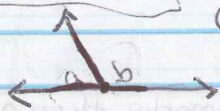


6. Vertical Angles: formed by 2 intersecting lines. They share a common vertex, but not a common side.



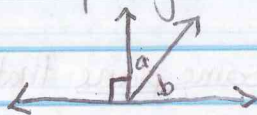
$\angle a$  and  $\angle b$  are vertical angles

7. Linear Pair: they are angles that share a vertex and a common side. Their non-common sides share a line.



$\angle a$  and  $\angle b$

8. Complimentary Angles: two angles that add up to  $90^\circ$



$\angle a$  and  $\angle b$

9. Supplementary Angles: two angles that add up to  $180^\circ$

