



## Geometry 1

### Lesson 1 Angles

What is an angle?

→ The space between two lines

What is a right angle?

→ Angle with 90 degrees

What is an acute angle?

→ Angle with less than 90 degrees



## Geometry 1

What is an obtuse angle?

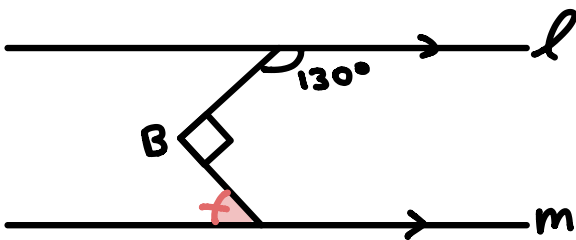
→ Angle with more than 90 degrees

Parallel lines

→ Always an equal distance apart

→ Will never intersect

Example: (AOPS Intro to Geometry 2.14) Assume that the two  $l$  and  $m$  are parallel, what is the measure of the marked angle?





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### Triangles

→ Always have 180 degree measures

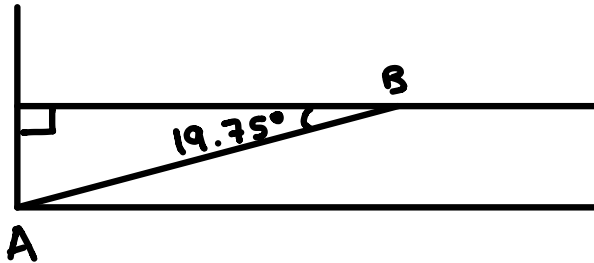
### Exercises:

1. I have a triangle with a 90.5 degree angle. Is it acute, obtuse, or right?

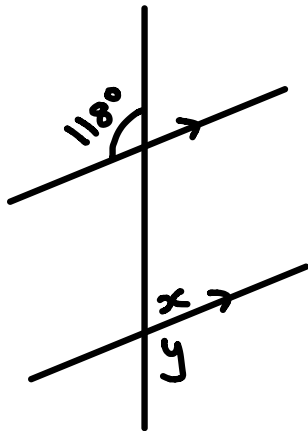


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2. A dog wants to walk from point A to point B, at what angle should he walk? Assume that the lines are parallel.



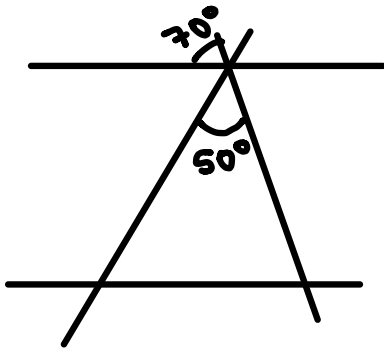
3. (AOPS Intro to Geometry 2.4.1) Find  $x$  and  $y$  in the diagram below.



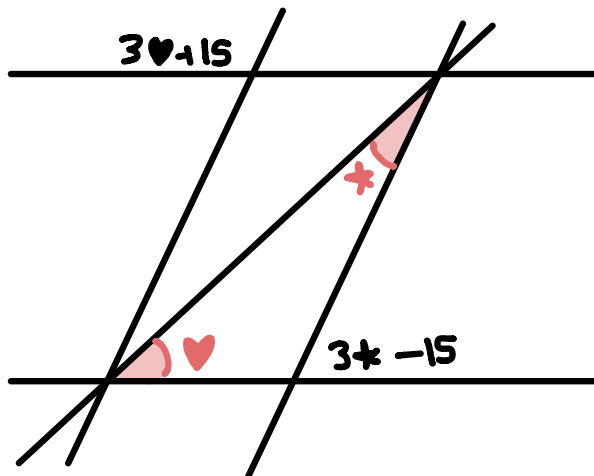


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4. (AOPS Intro to Geometry 2.16) Given that the two lines are parallel, find angle BCD and angle BDC.



5. Given that AB and CD are parallel, find the marked angles.



What Is The Measure Of Angle A In Degrees?

