

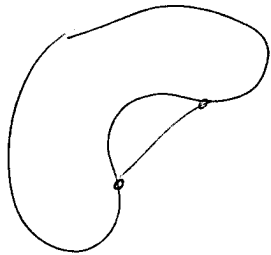
Winter Quiz 4

MATH 100:11 Mathematical Concepts
Instructor: Tara Taylor

March 6, 2012

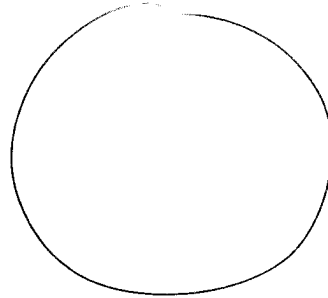
Name: SOLUTIONS

1. Draw an example of a curve that is simple and closed. Is your shape convex? Why or why not? [3]



not convex

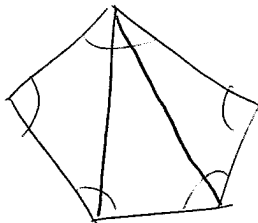
has points where line segment isn't in curve



convex

2. What are the interior angles of a regular convex pentagon? Draw a diagram and explain. [3]

5 sides

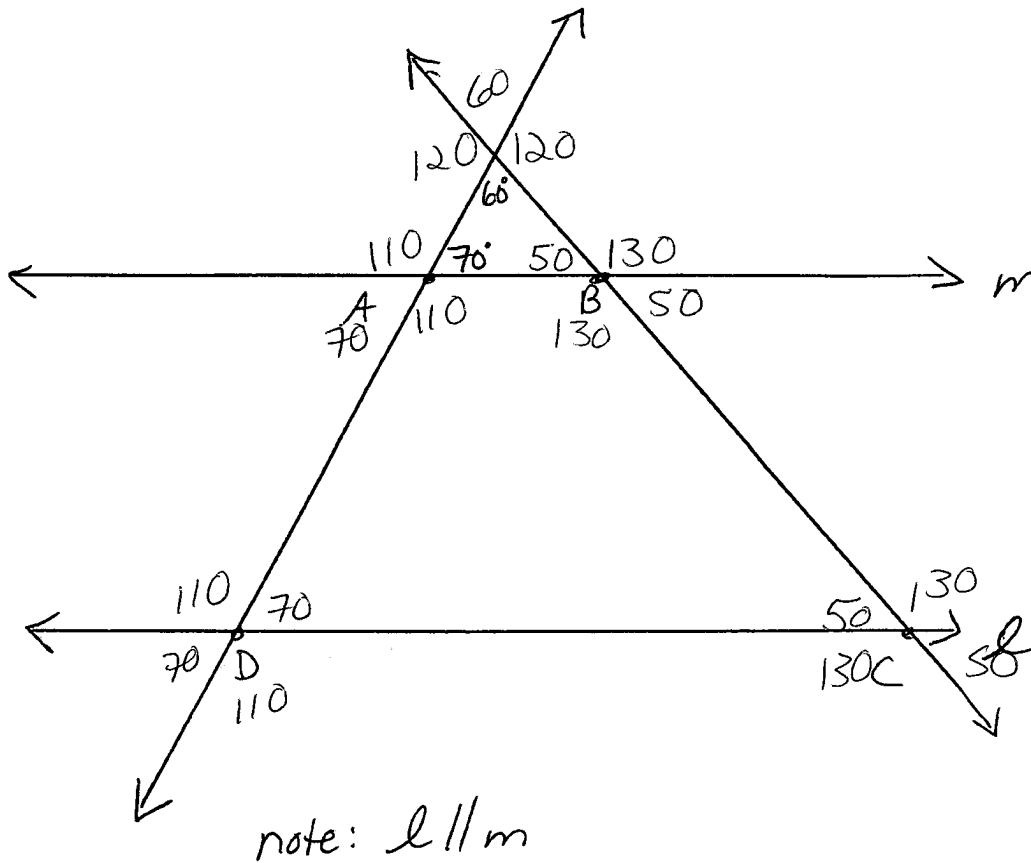


Can be split into 3 triangles

So interior angles add up to $3(180) = 540$
each angle is the same, so $\frac{540}{5} = 108^\circ$

3. Fill in all missing angles in the following diagram:

[3]



4. In the diagram above, what type of quadrilateral is $ABCD$? Explain.

[1]

$ABCD$ is a ~~parallelogram~~
trapezoid, just one pair of opposite sides
are parallel