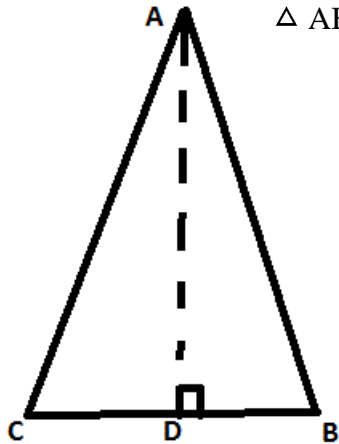


Name: _____
 Date: _____
 Class: _____

Geometry
 Unit 3
 HW 3-5

Use the following diagram for problems 1 through 5.



$\triangle ABC$ is isosceles with $\angle A$ as the vertex angle

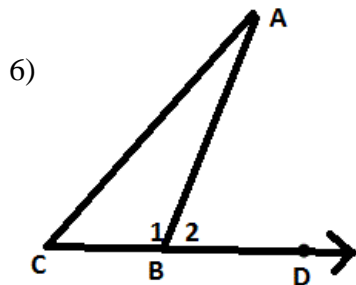
1) If $CD = 2x - 4$ and $CB = 2x + 13$ find DB

2) If $m\angle CAD = x - 1$ and $m\angle DAB = 2x - 18$ find $m\angle C$

3) If $AB = 17$, $DB = 10$ find the area of $\triangle ABC$

4) If $m\angle CAB = 52^\circ$ and $AB = 24$ find the perimeter of $\triangle ABC$.

5) If $CB = 20$ and $AC = 30$ find $m\angle B$



If $m\angle 1 = 10x - 15$, $m\angle 2 = 3x + 13$, and $m\angle C = x + 16$,
 Find $m\angle A$

7) In #6 which side of the triangle would be the shortest? How do you know?

8) $\triangle XAM$ is isosceles with \overline{AM} as the base. Find the length of the altitude if the base is 10in and a leg is 12in.

9) If a 27 foot wire is attached to a telephone pole in such a way that the angle of depression from the top of the pole is 63° , how tall is the telephone pole and how far will the wire be attached to the ground from the base of the pole?