

Warmup:

Solve the following systems:

$$y = -3x + 5$$

$$5x - 4y = -3$$

$$5x - 4(-3x + 5) = -3$$

$$5x + 12x - 20 = -3$$

$$17x - 20 = -3$$

$$+20 \quad +20$$

$$17x = 17$$

$$x = 1$$

$$\begin{aligned} y &= -3(1) + 5 \\ &= -3 + 5 \\ &= 2 \end{aligned}$$

2. 73°

3. 60°

4. 52°

85°

5. 110°

6. $3 \cdot 360^\circ - 180^\circ = 900^\circ$

7. $3 \cdot 180^\circ - 180^\circ = 360^\circ$

8. 69° -a

47° -b

116° -c

93° -d

86° -e

9. 30° - m

50° - n

82° - p

28° - q

32° - r

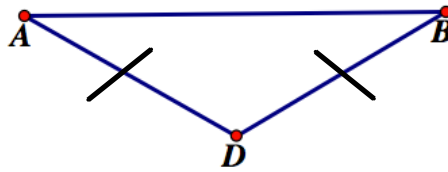
78° - s

118° - t

50° - u

Base Angles: \overline{AB}

Vertex Angle: $\angle D$



Isosceles Triangle Conjecture: If a triangle is isosceles, then its base angles are congruent.

Converse of the Isosceles Triangle Conjecture: If a triangle has two congruent angles, then it is an isosceles triangle.

Equilateral/Equiangular Triangle Conjecture:

If a triangle is equilateral, then it is equiangular. If a triangle is equiangular, then it is equilateral.



