



Question: As shown in the figure, line l_1 is parallel to line l_2 , and triangle ABC is an equilateral triangle. If angle $1 = 40^\circ$, then the size of angle 2 is ()

Show-o

(0.5, 0.3, 0.62, 0.46)

Emu3

Given that line l_1 is parallel to line l_2 , angle 1 is equal to angle 3. Since angle 1 is 40° , angle 2 is also 40° . Additionally, as triangle ABC is an equilateral triangle, all angles are equal, so angle 3 is also 40° . Therefore, the size of angle 2 is **40°** .

Janus Pro 7B

Since line l_1 is parallel to line l_2 , corresponding angles are equal. Therefore, angle 2 is equal to angle 1. Given that angle 1 is 40° , angle 2 is also 40° .

The answer is: **40**

MMaDA

<think>

To **determine** the size of angle 2, we need to use the properties of parallel lines and equilateral triangles. Let's break it down step by step.

1. ****Identify the given information:****

- Line l_1 is parallel to line l_2 .
- Triangle ABC is an equilateral triangle.
- angle $1 = 40^\circ$.

2. ****Understand the properties of an equilateral triangle:****

- In an equilateral triangle, all its angles are equal.
- Therefore, $\angle A = \angle B = \angle C = 60^\circ$.

3. ****Determine the relationship between the angles in the triangle:****

- Since l_1 is parallel to l_2 , the angles in the triangle ABC are related by the fact that the sum of the angles in a triangle is 180° .

- Let $\angle B = \angle C = x$. Then:
 $\angle A + \angle B + \angle C = 180^\circ$

- Substituting the known values:
 $40^\circ + x + 60^\circ = 180^\circ$

- Simplifying:
 $100^\circ + x = 180^\circ$

- Solving for x :
 $x = 80^\circ$

- Therefore, $\angle B = \angle C = 80^\circ$.

4. ****Determine the measure of angle 2:****

- The measure of angle 2 is **80°** .

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80