Check It Out
Progress Check
BigIdeasMath ✔ com

Tell whether the triangles are similar. Explain.   *(Section 5.4)*

1.
95° x°
46°
39° y°
46°

2.
51° 40° 79°
x° 40° y°
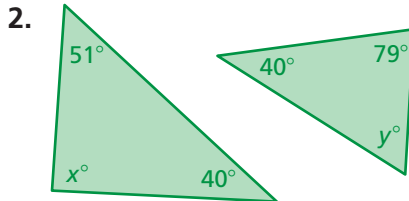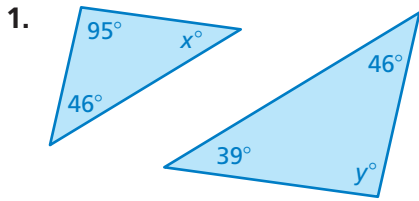
The triangles are similar. Find the value of x.   *(Section 5.4)*

3.
45°
x° 95°
45° 40°

4.
89°
65° 26°
65° x°
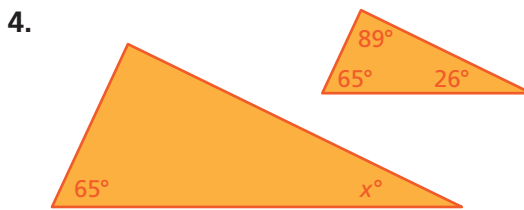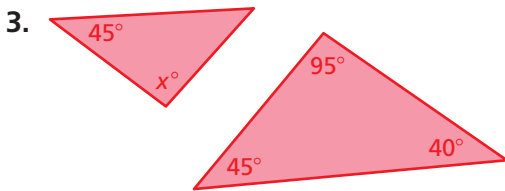
Use the figure to find the measure of the angle.
Explain your reasoning.   *(Section 5.5)*

5. ∠2

6. ∠6

7. ∠4

8. ∠1

t
1 2
4 3   j
5 6
82° 7   k
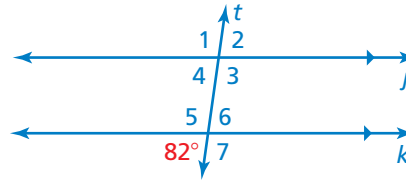
Complete the statement. Explain your reasoning.   *(Section 5.5)*

9. If the measure of ∠1 = 123°, then the measure of ∠7 = ☐.

10. If the measure of ∠2 = 58°, then the measure of ∠5 = ☐.

11. If the measure of ∠5 = 119°, then the measure of ∠3 = ☐.

12. If the measure of ∠4 = 60°, then the measure of ∠6 = ☐.

r   s
1 2   5 6
4 3   8 7   t
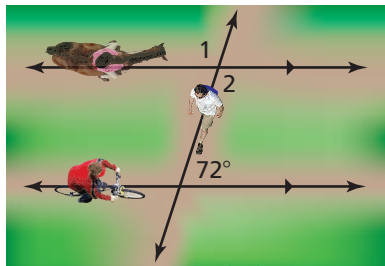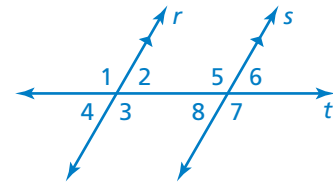
13. **PARK** In a park, a bike path and a horse riding path are parallel. In one part of the park, a hiking trail intersects the two paths. Find the measures of ∠1 and ∠2. Explain your reasoning.   *(Section 5.5)*

1
2
72°

14. **PERIMETER** The side lengths of a right triangle are doubled to make a similar triangle. Does the perimeter double as well? Explain.   *(Section 5.4)*