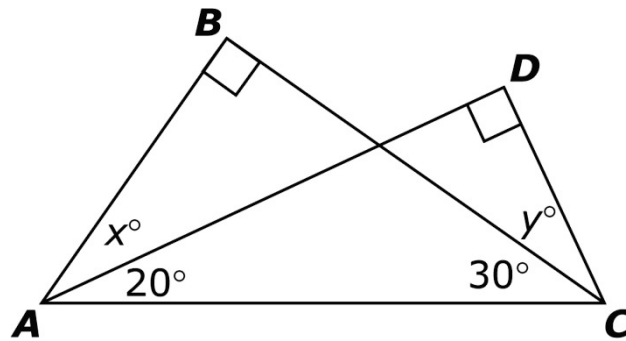


MAT.08.CR.1.0000G.G.129 C1 TG

Sample Item ID:	MAT.08.CR.1.0000G.G.129
Grade:	08
Claim(s):	Claim 1: Concepts and Procedures Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency.
Assessment Target(s):	1 G: Understand congruence and similarity using physical models, transparencies, or geometry software. 1 D: Analyze and solve linear equations and pairs of simultaneous linear equations.
Content Domain:	Geometry
Standard(s):	8.G.5, 8.EE.7
Mathematical Practice(s):	2, 5
DOK:	2
Item Type:	CR
Score Points:	2
Difficulty:	M
Key:	$x = 40, y = 40$
Stimulus/Source:	
Target-specific attributes (e.g., accessibility issues):	
Notes:	A maximum of 3 numerical digits can be entered in the response boxes. No symbols (like - or °) will be allowed. The protractor tool will be unavailable for this item.

Right triangle ABC and right triangle ACD overlap as shown below. Angle DAC measures 20° and angle BCA measures 30° .



not drawn to scale

What are the values of x and y ?

$x =$ degrees $y =$ degrees

Key and Distractor Analysis:

Students need to use the fact that the sum of the angles of a triangle is 180 degrees to find the correct values for x and y . Students may incorrectly assume that $x + 20$ must be equal to $y + 30$.

Each part of the response will yield one point for a correct answer. $x = 40$ and $y = 40$.