11-5-19 6th Geo

	Sides	3rd side
①	8, 12	$4 < m < 20$
②	3, 10	$7 < m < 13$
③	1, 6	$5 < m < 7$
④	5, 10	$5 < m < 15$
⑤	7, 7	$0 < m < 14$

Can the following be the measurements of a △.

⑥ 4, 11, 12 ✓ $7 < m < 15$

~~$1 < a < 23$~~

~~$8 < m < 16$~~

⑦ 2, 7, 9 $5 < m < 9$ NO

⑧ 17, 17, 17 Equilateral ✓

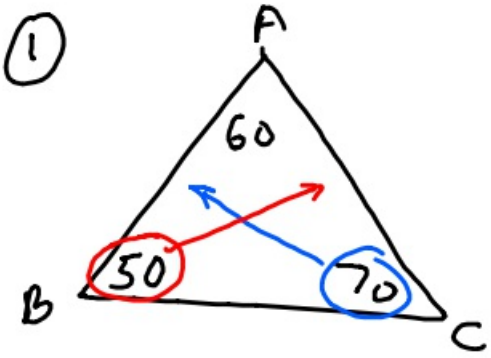
$0 < m < 34$

⑨ 0, 9, 11 No

?

New section

1

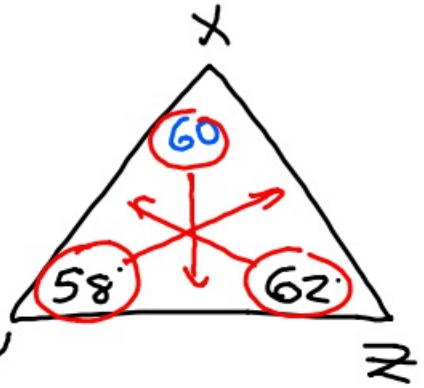


Can we determine which side is longest?

$\overline{AB}$ is longest

$\overline{AC}$ is shortest

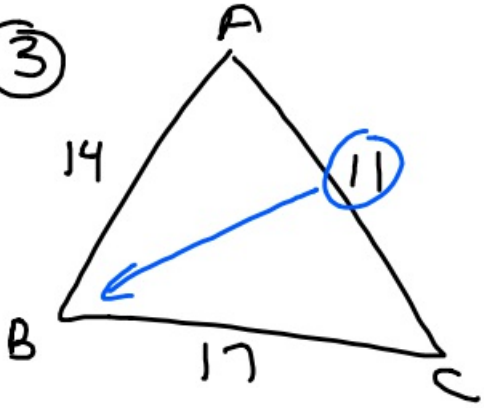
2



Put in order from smallest to largest

$\overline{XZ}, \overline{YZ}, \overline{XY}$

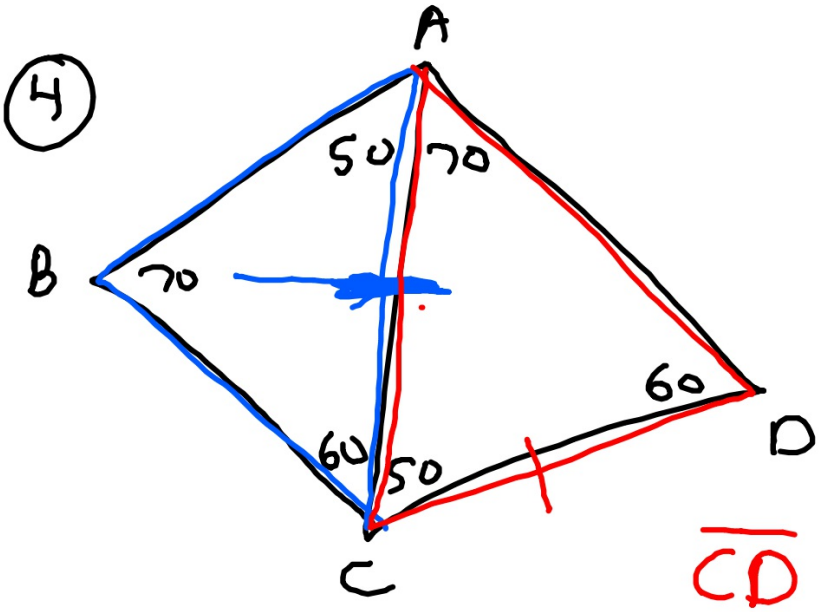
3



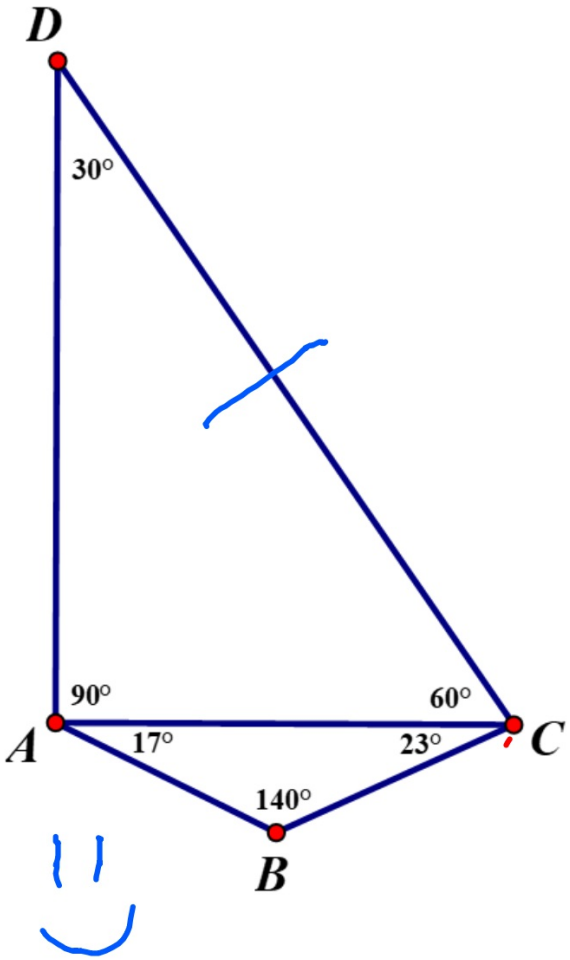
Put angles in order from smallest to largest.

$\angle B, \angle C, \angle A$

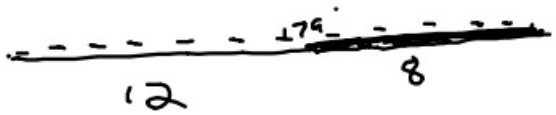
(4)

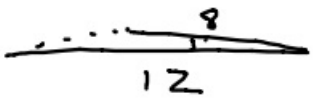


$\overline{CD}$ is longest


D
30°
90°
60°
A
17°
23°
C
140°
B

11-5-19 7th Geo





	Two of sides	Third side
①	12, 8	$4 < m < 20$
②	1, 7	$6 < m < 8$
③	10, 14	$4 < m < 24$
④	12, 7	$5 < m < 19$
⑤	6, 6	$0 < m < 12$

Can the following be real $\triangle$s.

⑥ 10, 8, 14 — $2 < m < 18$ Yes

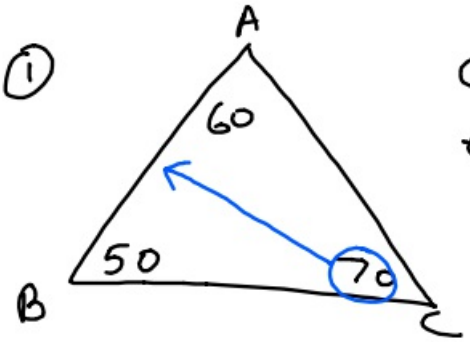
⑦ 2, 3, 4 — $1 < m < 5$ Yes

⑧ 4, 9, 13 — $5 < m < 13$ NO

⑨ 7, 7, 7 Equilateral Yes

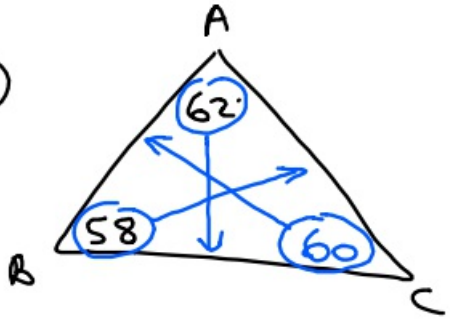
⑩ 1, 1, 2 — $0 < m < 2$ NO

New section

① 

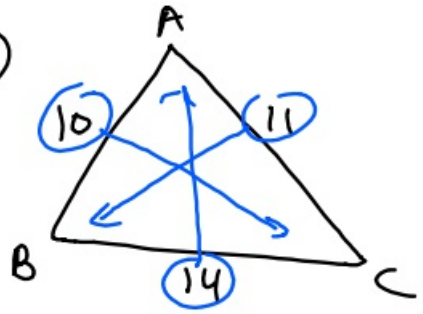
Can we determine the longest side?

$\overline{AB}$

② 

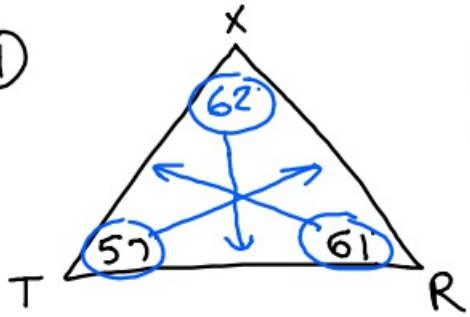
Put sides in order from smallest to longest

$\overline{AC}, \overline{AB}, \overline{BC}$

③ 

Put angles in order from smallest to largest.

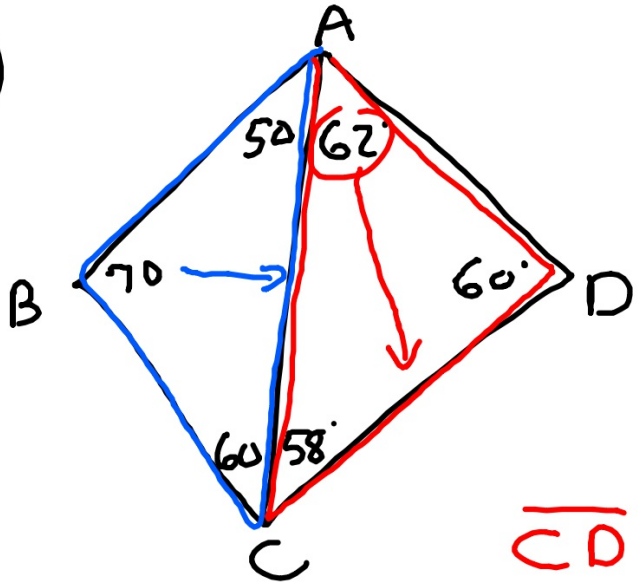
$\angle C, \angle B, \angle A$

④ 

Put sides in order from largest to smallest.

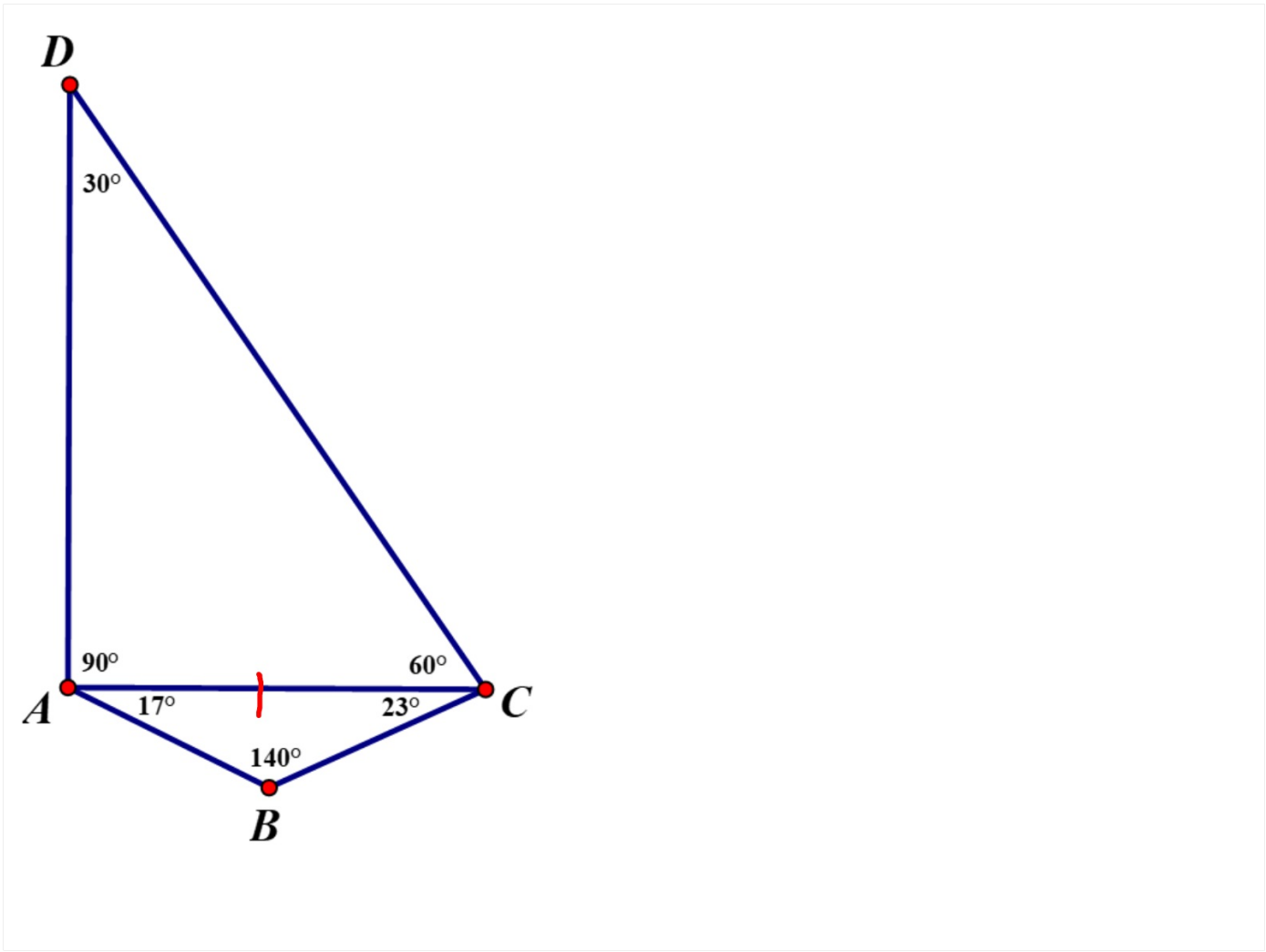
$\overline{TR}, \overline{XT}, \overline{XR}$

(5)



Can we determine the longest side?

$\overline{CD}$ longest


D
30°
90°
60°
A
17°
23°
C
140°
B