11-19-13
5ᵗʰ Geo

A
60
59°
61°
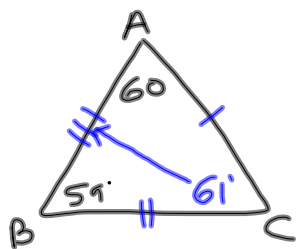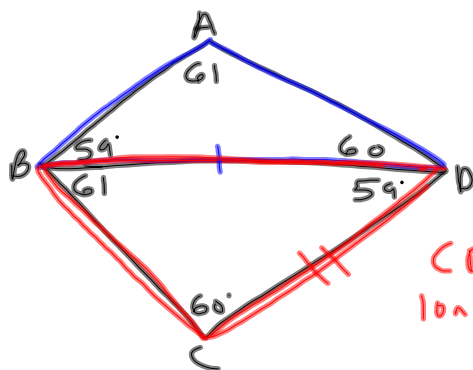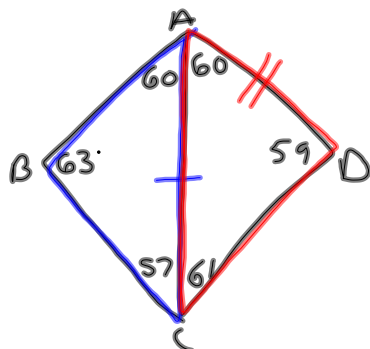B
C

List sides in order
from largest
to smallest.

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

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

A
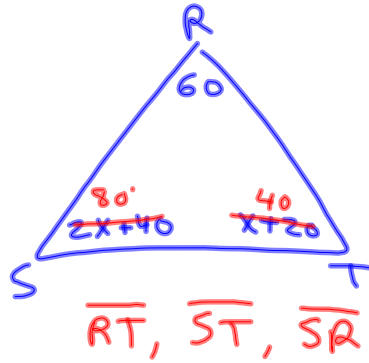61
B
59°
61
60
59°
D
60°
C

CD is
longest leg.

A
60 60
B 63°
59 D
57 61
C

AD is longest
leg.

54°
60
50
40 61

59
61°
60°
140°

1
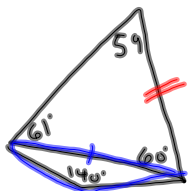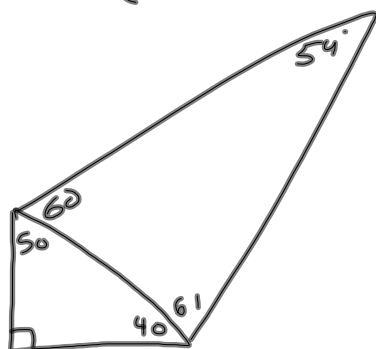
In △RST, ∠R = 60°
∠S = 2x + 40, ∠T = x + 20.
Put sides in order from
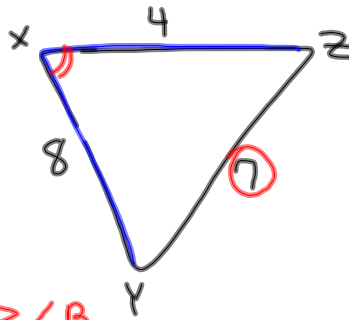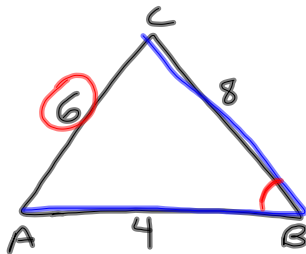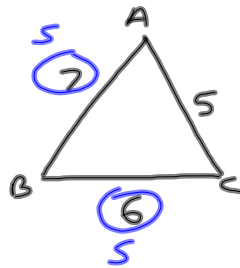largest to shortest?

R
60

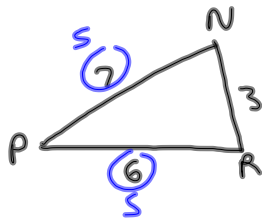80°
~~2X+40~~

40
~~X+20~~

S   T

$$60 + 2x + 40 + x + 20 = 180$$
$$3x + 120 = 180°$$
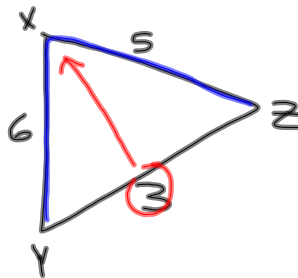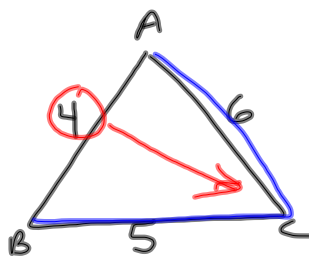$$\underline{-120 \quad 120}$$
$$3x = 60$$
$$x = 20°$$

$$\overline{RT}, \overline{ST}, \overline{SR}$$
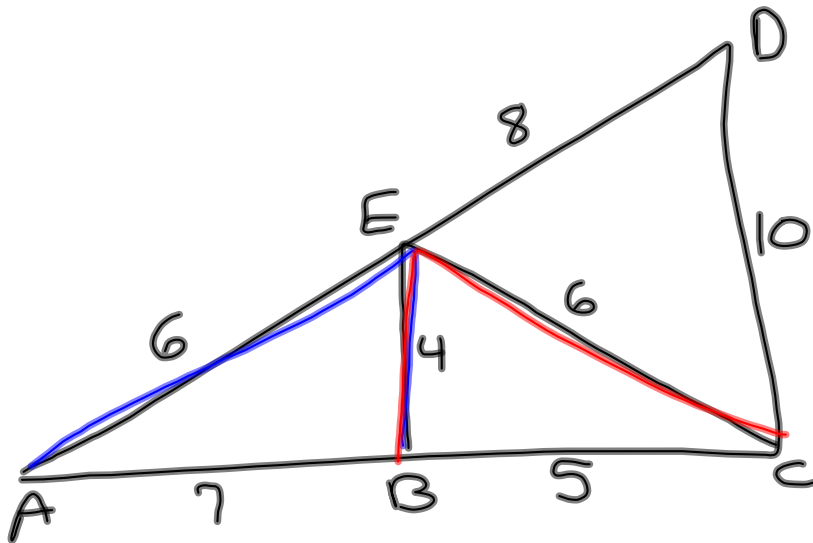

S
⑦
N

3

P
⑥
S
R

S
⑦
A

5

B
⑥
S
C

C

⑥
8

A   4   B

4
X   Z

8

⑦

Y

∠X > ∠B

A

④
6

B   5   C

X
5

6
③
Z

Y

∠C > ∠X
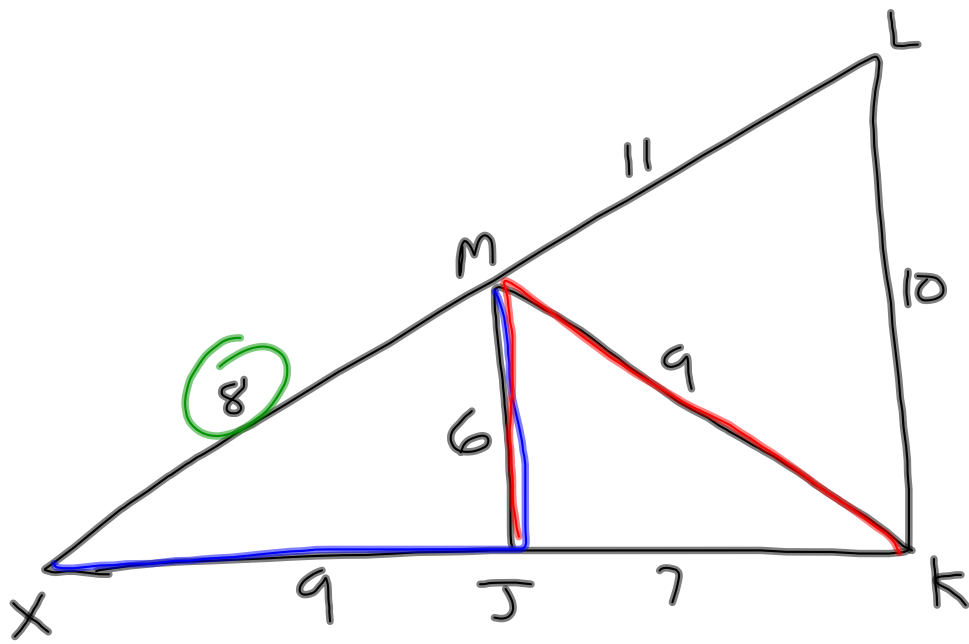
$$\angle XJM \geq \angle JMK$$

$$\angle AEB > \angle BEC$$

What can you conclude?

A
59
B 61   60° C

Put the sides
in order from
largest to
smallest.
$\overline{AC} > \overline{AB} > \overline{BC}$

B
⟨61⟩
9   9½
A 60 10 59 C
   61   60
      ✗ 12
   59°
      D
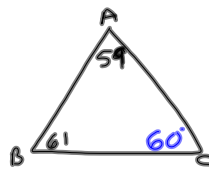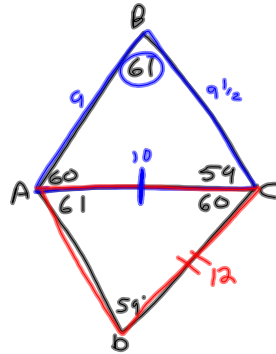
Which side
is longest?
$\overline{CD}$

A
60 50 ∦
B 70   60 D
50 70
C
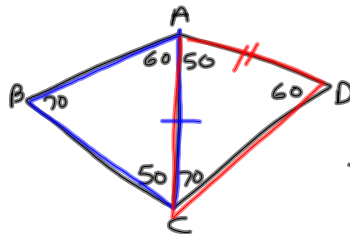
Longest
side
is
$\overline{AD}$

In △RST, ∠R = 4x+20,
∠S = 5x, and ∠T = x+60.
Put the sides in order from
longest to shortest.

R
4x+20
60
S 5x 50   x+60 70° T
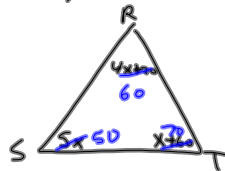
5x + 4x+20 + x+60 = 180
10x + 80 = 180
   -80 -80
10x = 100
x = 10

$\overline{RS}, \overline{ST}, \overline{RT}$

A
6   3
B   8   C

D
6   5
E   8   H

∠E > ∠B

4
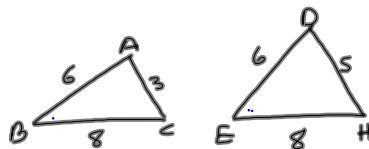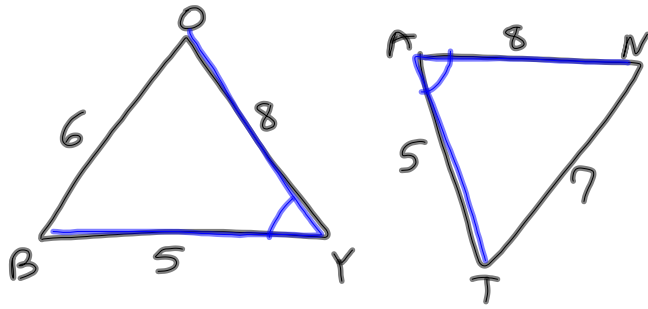
∠A > ∠Y
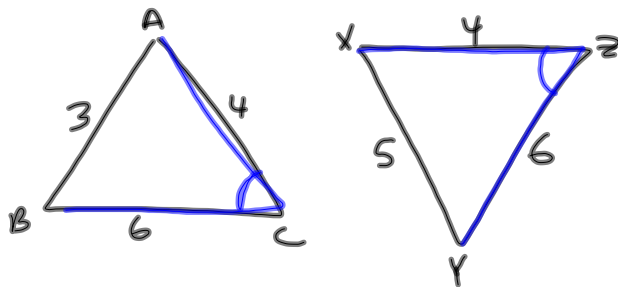
∠Z > ∠C

∠ABE ≥ ∠BEC

① ∠DEA ≤ ∠BCA

② ∠EAD ≥ ∠CAD