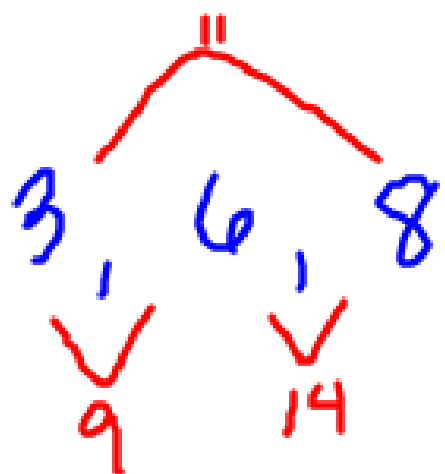


Quiz Review

5-4 and 5-5

①.



yes

②.



no

③.



yes

④ 10 and 12

$$10 + 12 > n$$

$$22 > n$$

$$n < 22$$

$$\begin{array}{r} 10 + n > 12 \\ -10 \quad -10 \end{array}$$

$$n > 2$$

$$\begin{array}{r} 12 + n > 10 \\ -12 \quad -12 \end{array}$$

$$\cancel{n > -2}$$

⑤ 7 and 13

$$7 + 13 > n$$

$$20 > n$$

$$n < 20$$

$$\begin{array}{r} 7 + n > 13 \\ -7 \quad -7 \end{array}$$

$$n > 6$$

$$\begin{array}{r} 13 + n > 7 \\ -13 \quad -13 \end{array}$$

$$n > \cancel{-6}$$

6.

$$12 + 8 > n$$

$$20 > n$$

$$\underline{n < 20}$$

$$12 + n > 8$$

$$\begin{array}{r} -12 \\ -12 \end{array}$$

$$n > -4$$

$$8 + n > 12$$

$$\begin{array}{r} -8 \\ -8 \end{array}$$

$$\underline{n > 4}$$

A. 10

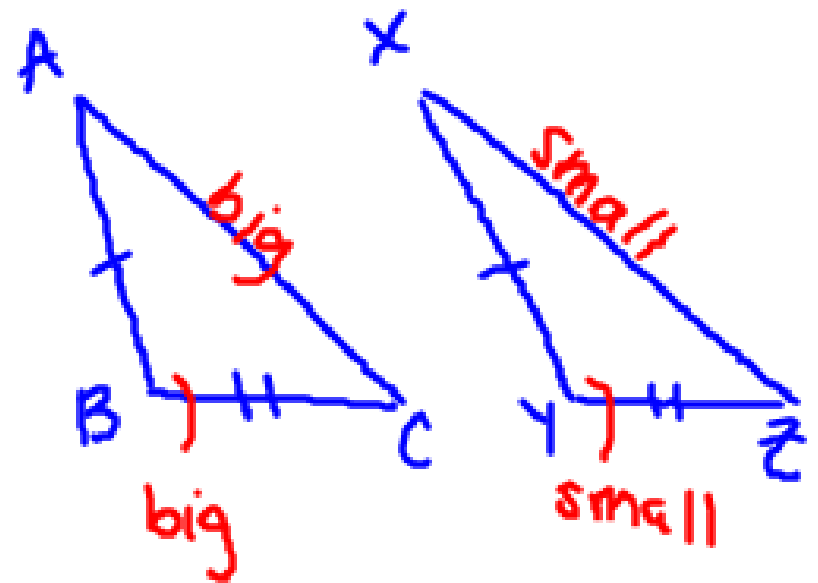
B. 9

C. 3

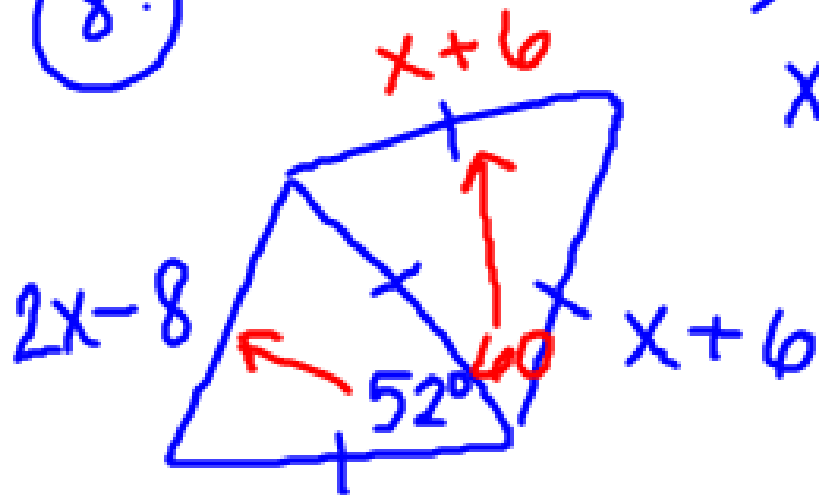
D. 16

⑦ If $m\angle B > m\angle Y$, what is the relationship between \overline{XZ} and \overline{AC} .

$$\overline{XZ} < \overline{AC}$$



8.



~~$x > 2$~~
 $x > 5$

~~$x + 6 > 0$~~
 ~~$x > -6$~~

~~$2x - 8 > 0$~~
 ~~$+8 \quad +8$~~

$2x > 8$

$x > 4$

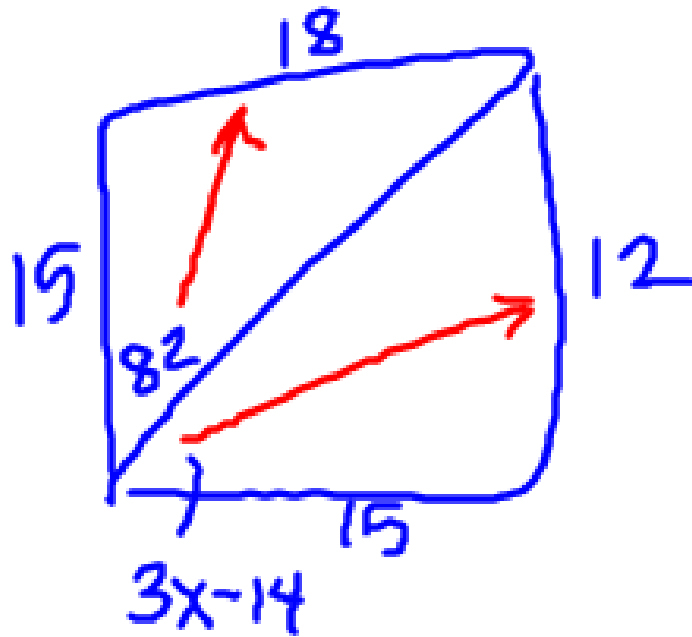
~~$x + 6 > 2x - 8$~~
 ~~$-x \quad -x$~~

~~$+6 > x - 8$~~
 ~~$+8 \quad +8$~~

$14 > x$

$x < 14$

9.



$$m\angle ABC < m\angle ABD$$

$$\begin{array}{r} 3x - 14 < 82 \\ +14 \quad +14 \end{array}$$

$$3x < 96$$

$$x < 32$$

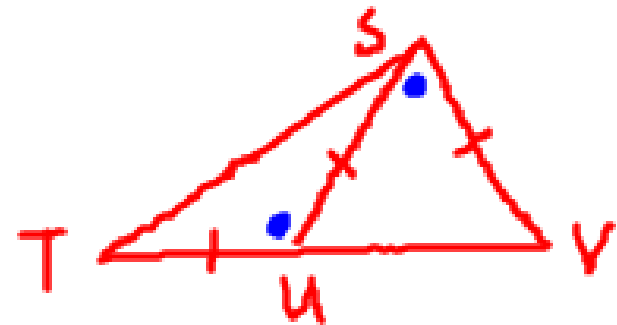
$$\begin{array}{r} 3x - 14 > 0 \\ +14 \quad +14 \end{array}$$

$$3x > 14$$

$$x > \frac{14}{3}$$

Given: $\overline{TU} \cong \overline{US}$, $\overline{US} \cong \overline{SV}$

Prove: $ST > UV$



Statements	Reasons
1. $\overline{TU} \cong \overline{US}$ $\overline{US} \cong \overline{SV}$	1. Given (Ext. \angle Ineq. Thm.)
2. $\angle SUT > \angle USV$	2. Exterior Angle Inequality Theorem
3. $ST > UV$	3. SAS Inequality Thm