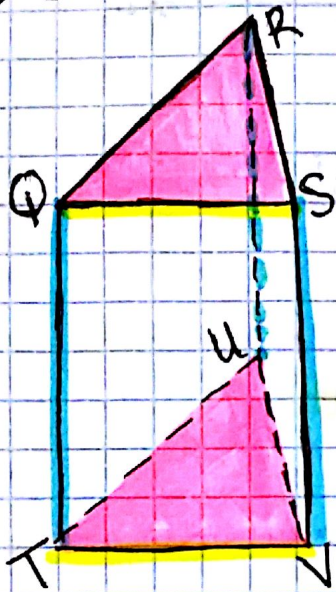


QUIZ 3-1 ... AGAIN...



① Name a plane parallel to plane QRS.

plane TUY

② Name a segment parallel to QT.

RU or SV

③ Name a segment parallel to TV.

QS

④ Name a segment skew to TV.

QR or RS or RU

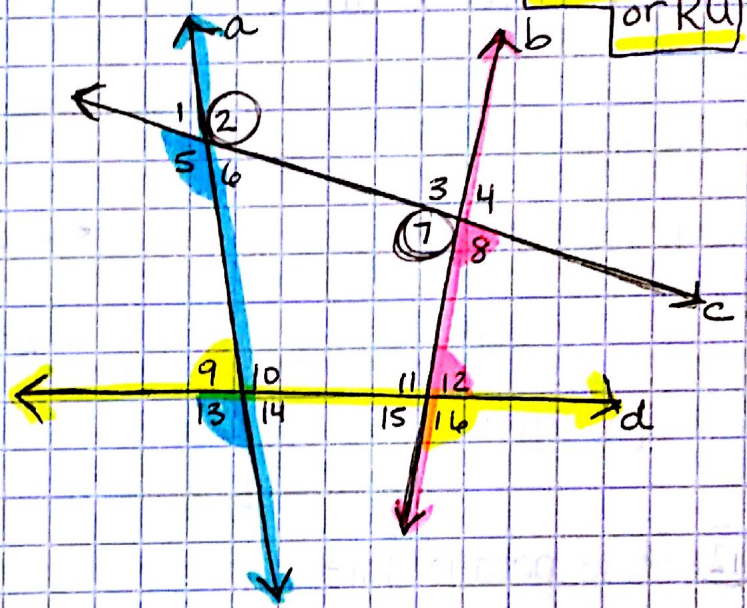
Classify the angles and name the transversal.

⑤ $\angle 9$ and $\angle 16$: AE
transversal: line d

⑥ $\angle 8$ and $\angle 12$: SSI
transversal: line b

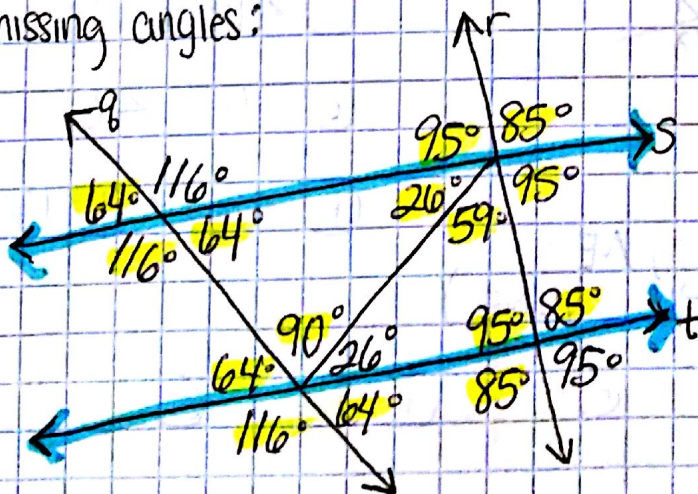
⑦ $\angle 5$ and $\angle 13$: C
transversal: line a

⑧ $\angle 2$ and $\angle 7$: AI
transversal: line c



C = corresponding
AI = alternate interior
AE = alternate exterior
SSI = same-side interior (consecutive interior)

⑨ Find all missing angles:



s || t

⑩ $a \parallel b$ Find x and y .

$$10x - 8 = 4x + 64$$

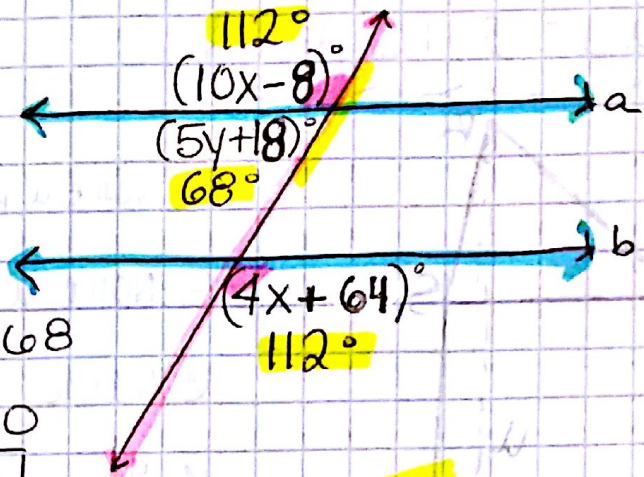
$$6x = 72$$

$$x = 12$$

$$5y + 18 = 68$$

$$5y = 50$$

$$y = 10$$



⑪ $a \parallel b$ Find x and y .

$$56 + 4x + 6x + 14 = 180$$

$$10x + 70 = 180$$

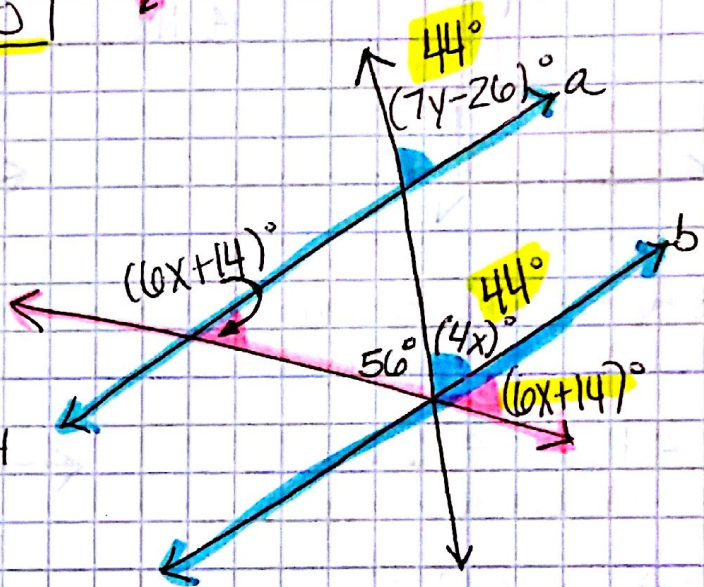
$$10x = 110$$

$$x = 11$$

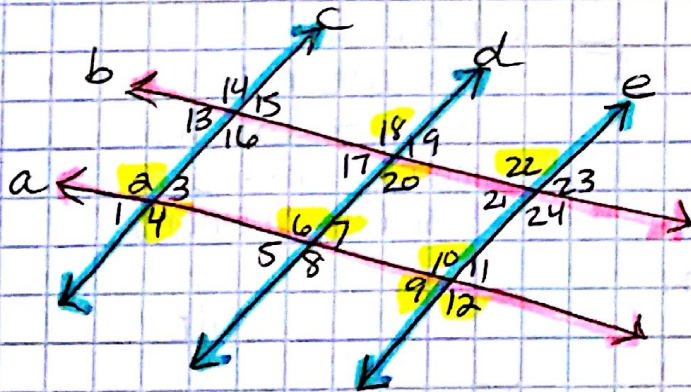
$$7y - 26 = 44$$

$$7y = 70$$

$$y = 10$$



⑫ State parallel lines.
State converse.



① $\angle 2 \cong \angle 10$

parallel
c//e

② $\angle 22 \cong \angle 12$

b//a

③ $\angle 7 + \angle 10 = 180$

d//e

④ $\angle 18 \cong \angle 20$

NO!

⑤ $\angle 4 \cong \angle 6$

c//d

⑥ $\angle 4 + \angle 9 = 180$

c//e

converses: (C=, AI=, AE=, SSI=180, NONE)

① C=

② AE=

③ SSI=

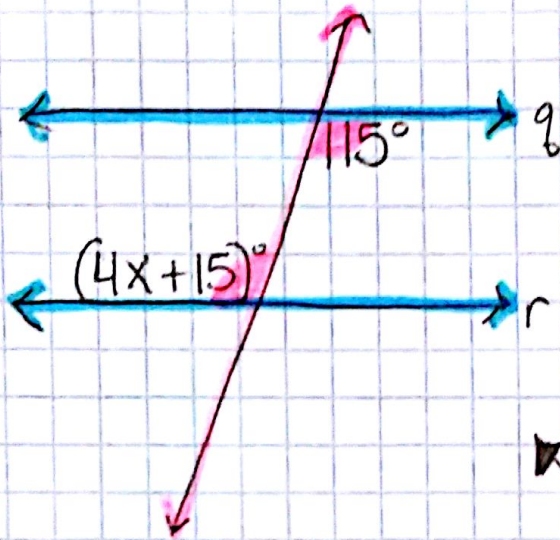
④ NO!

⑤ AI=

⑥ SSI=

Find x so that $q \parallel r$:

(13)



$$\boxed{x = 25}$$

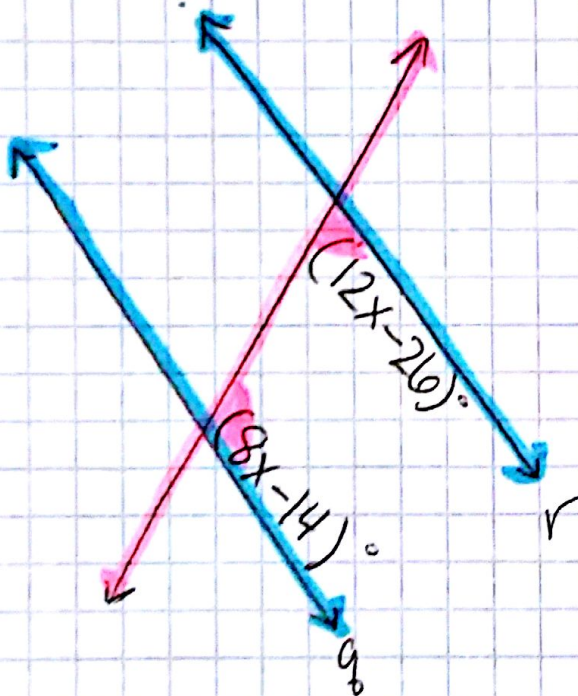
converse: $AI =$

$$4x + 15 = 115$$

$$4x = 100$$

$$\boxed{x = 25}$$

(14)



$$\boxed{x = 11}$$

converse:

$SSI = 180^\circ$

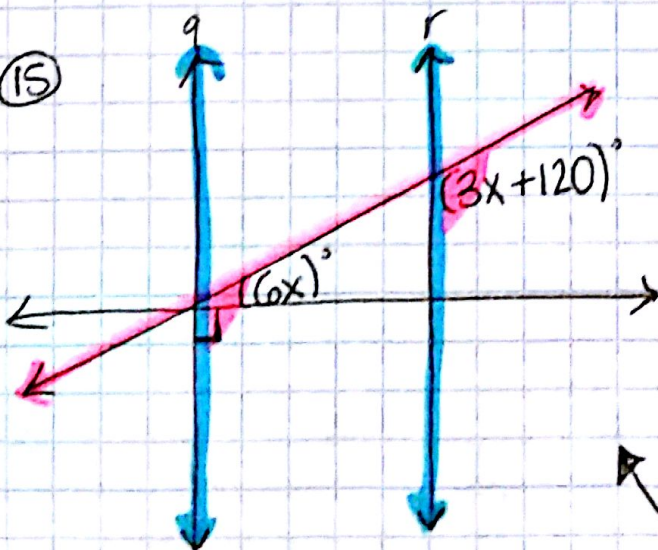
$$12x - 20 + 8x - 14 = 180$$

$$20x - 40 = 180$$

$$20x = 220$$

$$\boxed{x = 11}$$

(15)



$$\boxed{x = 10}$$

converse:

$C =$

$$6x + 90 = 3x + 120$$

$$3x = 30$$

$$\boxed{x = 10}$$