

⑦ Name a pair of perpendicular lines.

Why are they perpendicular?

⑧ Name two pairs of complementary angles.

⑨ Give a linear pair of angles.

⑩ State a pair of vertical angles.

Give the measure of a complement and a supplement, if possible, of each angle whose degree measure is given.

⑪ 42°

$$\begin{array}{r} +48 \\ \hline 90^\circ \end{array}$$

⑫ 113°

$$\begin{array}{r} +67 \\ \hline 180^\circ \end{array}$$

⑬ y

⑭ An angle is twice that of its supplement. What is the angle's measure?

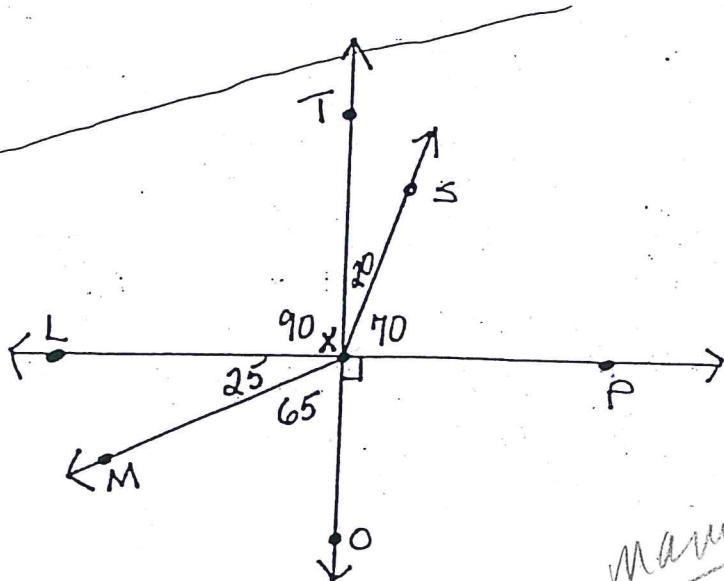
True or False? For each false statement, draw a picture showing why it is false.

⑮ Two lines that form vertical angles also form adjacent angles.

⑯ An obtuse angle and an acute angle cannot be vertical angles.

⑰ Two lines that do not intersect are parallel.

⑱ All right angles are always a linear pair.



- ⑦ Name a pair of perpendicular lines.

$$\overleftrightarrow{LP} \perp \overleftrightarrow{TO}$$

Why are they perpendicular?
because $\angle LXT$ is 90°

- ⑧ Name two pairs of complementary angles.
~~Many~~

$$\angle LXS + \angle LSX \quad \angle LXM + \angle LMN$$

- ⑨ Give a linear pair of angles.

- ⑩ State a pair of vertical angles.

many Ex) $\angle LXS, \angle LSX$ $\angle LLX, \angle LPX$ $\angle LXP, \angle LXO$

Give the measure of a complement and a supplement, if possible, of each angle whose degree measure is given.

⑪ 42°
comp 48°
Suppl 138°

⑫ 113°
no compl.
Suppl 67°

⑬ y
Comp $90-y$
Suppl $180-y$

- ⑭ An angle is twice that of its supplement. What is the angle's measure?

$$x + 2x = 180 \\ 3x = 180$$

$$x = 60^\circ \text{ big angle: } 120^\circ$$

True or False? For each false statement, draw a picture showing why it is false.



- ⑮ Two lines that form vertical angles also form adjacent angles.



- ⑯ An obtuse angle and an acute angle cannot be vertical angles.



- ⑰ Two lines that do not intersect are parallel.



- ⑱ Adjacent angles are always a linear pair.

