

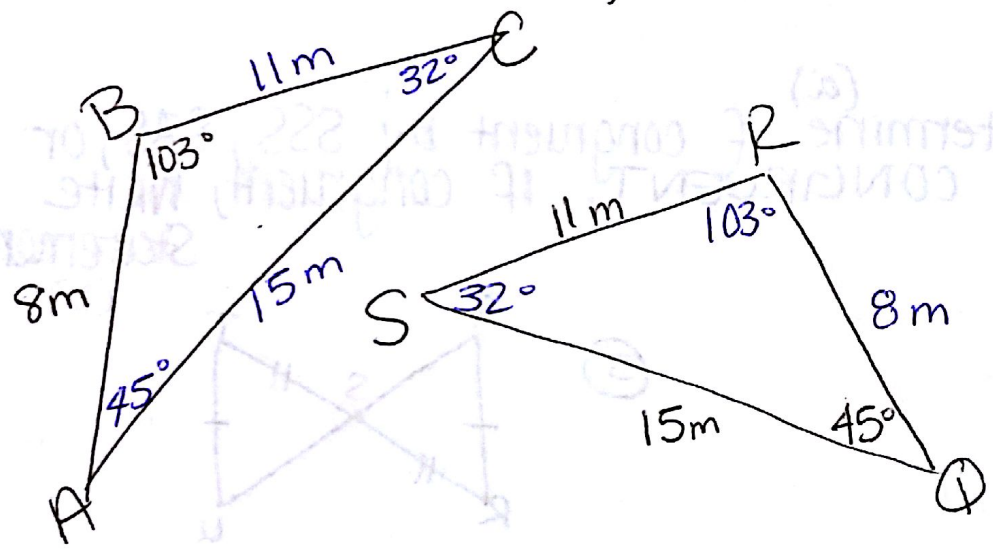
Quiz 4-2

KEY

① IF  $\triangle DOG \cong \triangle CAT$ , complete following:

- |                                                 |                                       |                                                 |
|-------------------------------------------------|---------------------------------------|-------------------------------------------------|
| $\overline{DG} \cong \underline{\overline{CT}}$ | $\angle C \cong \underline{\angle D}$ | $\triangle TCA \cong \underline{\triangle GDO}$ |
| $\overline{AT} \cong \underline{\overline{OG}}$ | $\angle G \cong \underline{\angle T}$ | $\triangle OGD \cong \underline{\triangle ATC}$ |
| $\overline{DO} \cong \underline{\overline{CA}}$ | $\angle O \cong \underline{\angle A}$ | $\triangle GOD \cong \underline{\triangle TAC}$ |

② IF  $\triangle ABC \cong \triangle QRS$ , FIND MISSING MEASURE.



$BC = \underline{11m}$

$\angle A = \underline{45^\circ}$

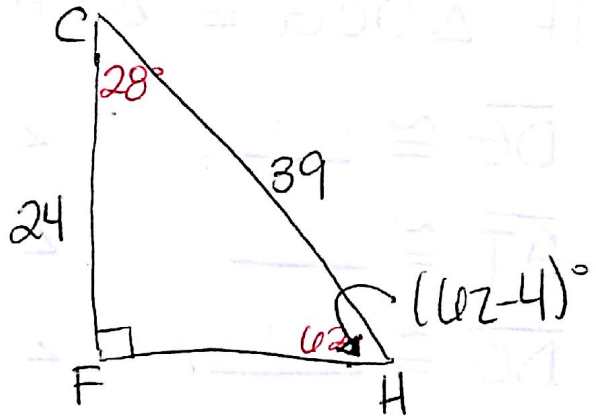
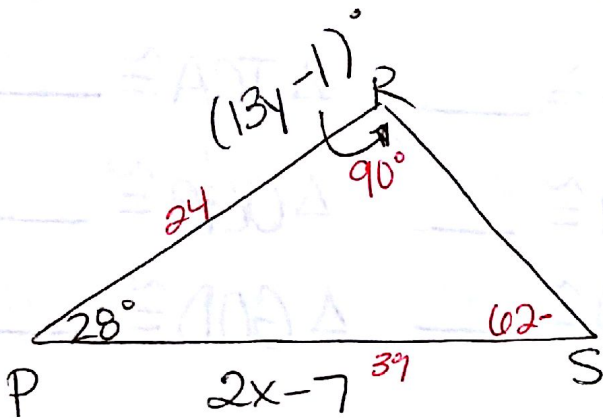
$AC = \underline{15m}$

$\angle C = \underline{32^\circ}$

$RQ = \underline{8m}$

$\angle R = \underline{103^\circ}$

③  $\triangle PRS \cong \triangle CFH$ . Find  $x$ ,  $y$ , and  $z$



$$2x - 7 = 39$$

$$2x = 46$$

$$x = 23$$

$$13y - 1 = 90$$

$$13y = 91$$

$$y = 7$$

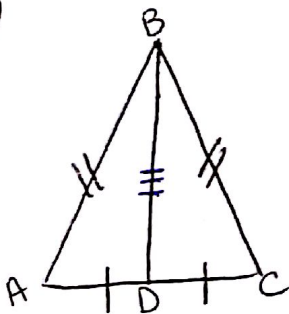
$$6z - 4 = 6z$$

$$6z = 66$$

$$z = 11$$

For #4-7, determine if congruent by SSS, SAS, or say NOT CONGRUENT. If congruent, write Statement (b)

④

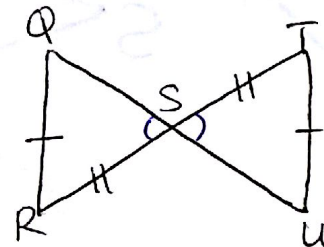


\* reflexive

(a) SSS / SAS / NO

(b)  $\triangle ABD \cong \triangle CBD$

⑤

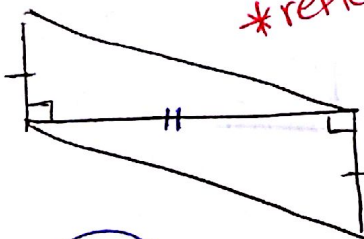


\* vertical angles

(a) SSS / SAS / NO

(b)  ~~$\triangle \text{ASS} \cong \triangle \text{SSS}$~~

⑥

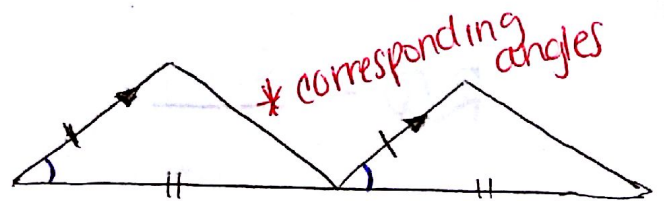


\* reflexive

(a) SSS / SAS / NO

(b)  $\triangle \cong \triangle$

⑦



\* corresponding angles

(a) SSS / SAS / NO

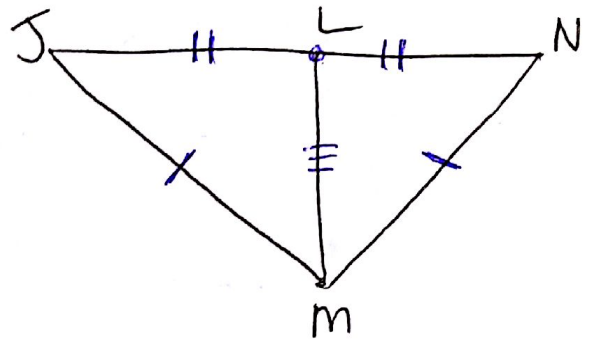
(b)  $\triangle \cong \triangle$

GIVEN:

⑧  $\overline{JM} \cong \overline{MN}$

L is m.p. of  $\overline{JN}$

PROVE:  $\triangle JLM \cong \triangle NLM$



statements

reasons

1.  $\overline{JM} \cong \overline{MN}$

1. given

2. L is m.p. of  $\overline{JN}$

2. given

3.  $\overline{JL} \cong \overline{NL}$

3. def. midpoint.

4.  $\overline{LM} \cong \overline{LM}$

4. reflexive

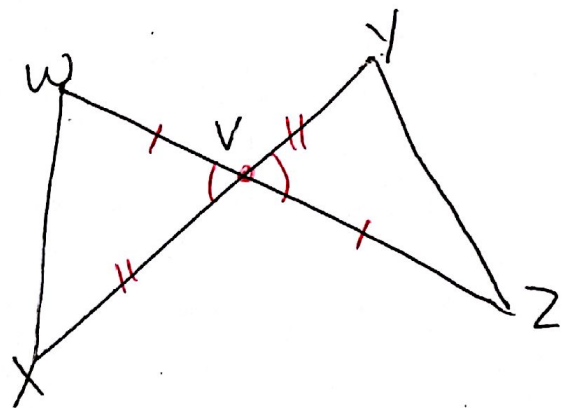
5.  $\triangle JLM \cong \triangle NLM$

5. SSS

⑨ GIVEN:

V is m.p. of  $\overline{WZ}$  and  $\overline{XY}$

Prove:  $\triangle WXV \cong \triangle ZYV$



statements

reasons

1. V is m.p. of  $\overline{WZ}, \overline{XY}$

1. Given

2.  $\overline{WV} \cong \overline{ZV}$

2. def midpoint

3.  $\overline{XV} \cong \overline{YV}$

3. def midpoint

4.  $\angle WVX \cong \angle ZVY$

4. VAT (vertical angle thm)

5.  $\triangle WXV \cong \triangle ZYV$

5. SAS