

Triangle Proofs Test  
Review

- 1) A    2) A    3) C    4) A    5) B  
 6) A    7) A    8) C    9) B    10) D  
 11) B    12) C

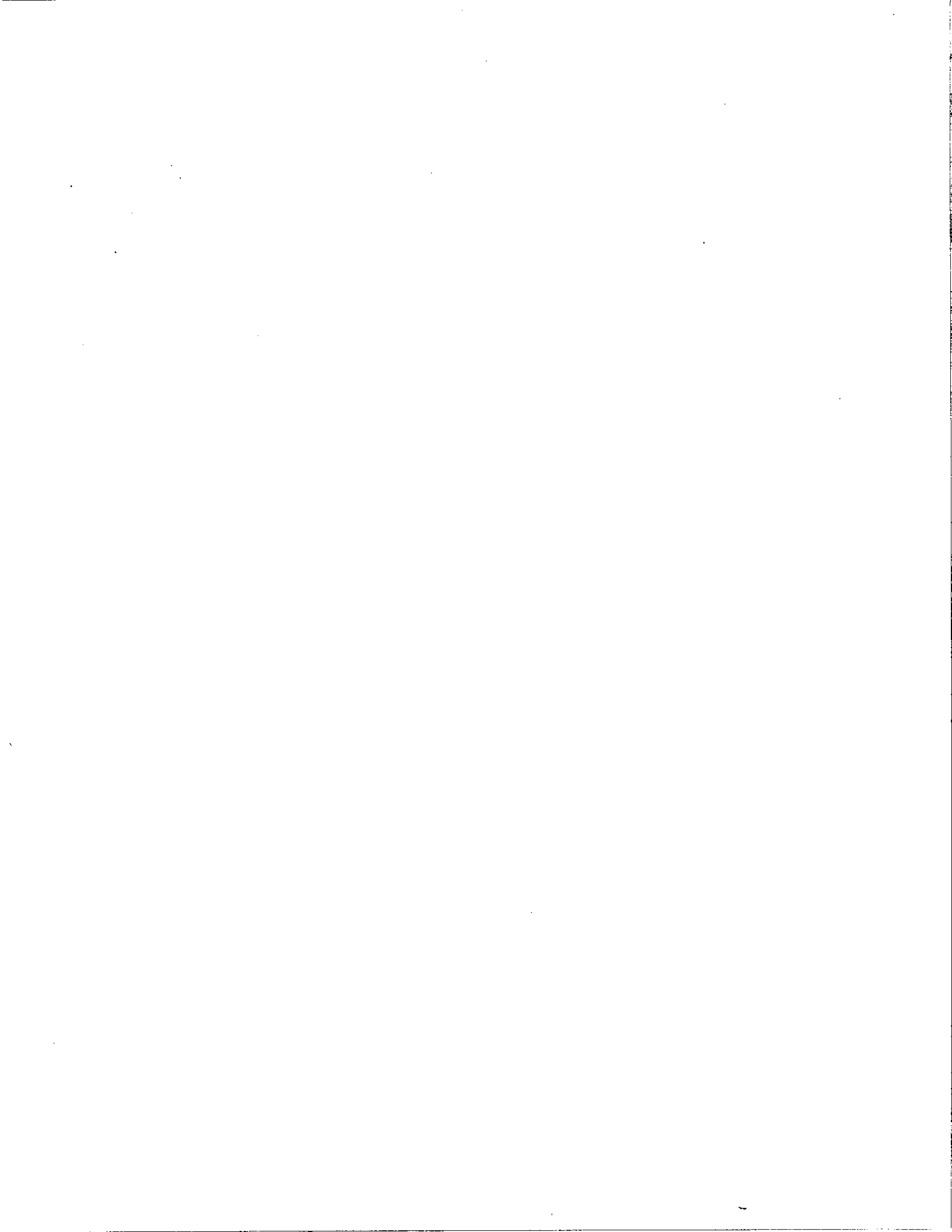
- 13) (1) Given  
 (2) Midpoint creates 2  $\cong$  segments  
 (3)  $\perp$  lines form right  $\angle$ 's  
 (4) All right  $\angle$ 's are  $\cong$   
 (5) Reflexive property  
 (6) SAS

14)

Statements	Reasons
1) $\overline{FO}$ bisects $\overline{AS}$ $\angle A \cong \angle S$	1) Given
2) $\overline{AT} \cong \overline{ST}$	2) Segment bisector creates two $\cong$ segments
3) $\angle FTA \cong \angle OTS$	3) Vertical $\angle$ 's are $\cong$
4) $\triangle FTA \cong \triangle OTS$	4) ASA

15)

Statements	Reasons
1) $\overline{PQ} \perp \overline{QS}$ , $\overline{TS} \perp \overline{QS}$ $R$ is midpoint of $\overline{QS}$	1) Given
2) $\angle PQR$ + $\angle TSR$ are right angles	2) $\perp$ lines form right angles
3) $\angle PQR \cong \angle TSR$	3) All right $\angle$ 's are $\cong$
4) $\overline{QR} \cong \overline{SR}$	4) Midpoint creates 2 $\cong$ segments
5) $\angle PRQ \cong \angle TRS$	5) Vertical $\angle$ 's are $\cong$
6) $\triangle PRQ \cong \triangle TRS$	6) ASA
7) $\angle Q \cong \angle R$	7) CPCTC



Statements	Reasons
1) $\overline{PS} \perp \overline{QR}$ , $\overline{PS}$ bisects $\angle QPR$	1) Given
2) $\angle PSQ$ and $\angle PSR$ are right angles	2) $\perp$ lines form right angles
3) $\angle PSQ \cong \angle PSR$	3) All right $\angle$ 's are $\cong$
4) $\angle QPS \cong \angle RPS$	4) Angle bisector creates 2 $\cong$ angles
5) $\overline{PS} \cong \overline{PS}$	5) Reflexive property
6) $\triangle PQS \cong \triangle PRS$	6) ASA
7) $\angle Q \cong \angle R$	7) CPCTC

Statements	Reasons
1) $\overline{TS} \cong \overline{TR}$ , $\angle P \cong \angle Q$	1) Given
2) $\angle PTS \cong \angle QTR$	2) Vertical $\angle$ 's are $\cong$
3) $\triangle PTS \cong \triangle QTR$	3) AAS
4) $\overline{PS} \cong \overline{QR}$	4) CPCTC

Statements	Reasons
1) $\overline{DA} \cong \overline{CB}$ , $\overline{DA} \perp \overline{CB}$ , $\overline{CB} \perp \overline{AB}$	1) Given
2) $\angle DAB + \angle CBA$ are right angles	2) $\perp$ lines form right $\angle$ 's
3) $\angle DAB \cong \angle CBA$	3) All right $\angle$ 's are $\cong$
4) $\overline{AB} \cong \overline{AB}$	4) Reflexive property
5) $\triangle DAB \cong \triangle CBA$	5) SAS
6) $\overline{BD} \cong \overline{AC}$	6) CPCTC



19)	Statements	Reasons
	1) $\overline{DT} \cong \overline{DG}, \angle C \cong \angle S$	1) Given
	2) $\angle D \cong \angle D$	2) Reflexive property
	3) $\triangle DCC \cong \triangle DST$	3) ASA
	4) $\overline{ST} \cong \overline{CG}$	4) CPCTC

20)	Statements	Reasons
	1) $\overline{AB} \cong \overline{AC}, \overline{BD} \cong \overline{DC}$	1) Given
	2) $\overline{AD} \cong \overline{AD}$	2) Reflexive property
	3) $\triangle ADB \cong \triangle ADC$	3) SSS
	4) $\overline{BD} \cong \overline{CD}$	4) CPCTC
	5) $\triangle BDC$ is isosceles	5) An isosceles $\triangle$ has 2 $\cong$ sides

21)	Statements	Reasons
	1) $\overline{SR} \parallel \overline{PQ}, \overline{TU}$ bisects $\overline{SQ}$	1) Given
	2) $\angle RSQ \cong \angle PQS$	2) When lines are $\parallel$ , alternate interior angles are $\cong$
	3) $\overline{SV} \cong \overline{QV}$	3) Segment bisector creates 2 $\cong$ segments
	4) $\angle SVT \cong \angle QVU$	4) Vertical $\angle$ 's are $\cong$
	5) $\triangle SVT \cong \triangle QVU$	5) ASA
	6) $\overline{TV} \cong \overline{UV}$	6) CPCTC
	7) $V$ is the midpoint of $\overline{TU}$	7) A midpoint creates 2 $\cong$ segments