**Using Congruent Triangles to Show Other Congruencies**

(On a Separate Sheet of Paper)

M

C

B

A



D

B

A

D

C

J

O

K

  

Q

P

K

O



R

O

S

4

3

2

1

M

L

J

4

3

2

1

K

J

M

  

4

3

2

1

T

S

R

P

N

2

1

P

R

S

O

N

B

A



D

C

E

 Given: , Given:

Prove:  Prove: <PNR<TNS

Q

5

4

3

2

1

S

R

P

2

1

D

D

C

B

A

E

C

G

F

B

Given:  Given:  Given: 

Prove:  Prove:  Prove: 

6

5

4

3

2

1

A

I

R

F

Given: 

 bisects <FRI, 

6

Prove: 

Answers:

1.

Given

Def angle Bisector

Reflexive

SAS

CPCTC

Def of Angle bisector

2.

Given

PAIC

Reflexive

SAS

3.

Given

Def of Midpoint

If 2 lines are perp they form congruent adjacent angles

Reflexive

SAS

CPCTC

4.

Given

Reflexive

AAS

CPCTC

Def Midpoint

5.

Given

Reflexive

ASA

CPCTC

Def Iso Triangle

6.

Given

VAT

Def of Midpoint

ASA  
CPCTC

Def of Midpoint

7.

Given

VAT

SAS

CPCTC

8.

Given

Def of Perp

Transitive

AAS

CPCTC

9.

Given

AAP

Subst

Subtract

SAP

Subst

Subtract

SAS

CPCTC

10.

Given

PAIC

Reflexive

ASA

CPCTC

11.

Given

Reflexive

SAP  
Subst

Subtract

SAS

CPCTC

12. 13. Given

Given Reflexive

Reflexive Def angle bisecto

SAS SAS

CPCTC CPCTC

VAT

Transitive