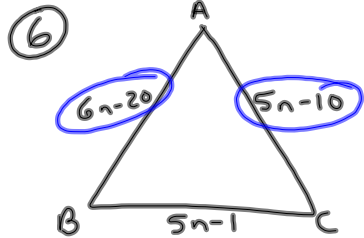


11-12-13  
5<sup>th</sup> Geo

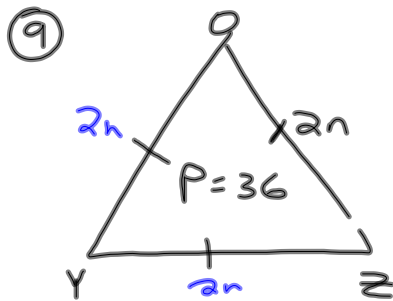
Ch. 4 PT 2



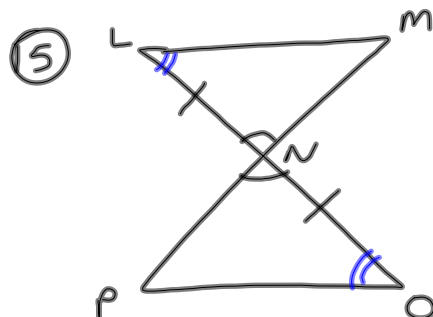
$AB \cong AC$   
 $6n-20 = 5n-10$   
 $\begin{array}{r} -5n \quad -5n \\ \hline n-20 = -10 \\ \hline n = 10 \end{array}$   
 $n = 10$   
 $AB = 6 \cdot n - 20$   
 $6 \cdot 10 - 20$   
 $= 40$

⑧ Found in #6 that  $n = 10$

$BC = 5n - 1$   
 $= 5 \cdot 10 - 1 = 49$

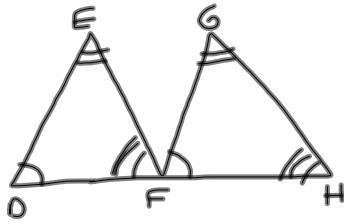


$2n + 2n + 2n = 36$   
 $6n = 36$   
 $n = 6$



Prove  $\cong$  by  
ASA  
 $\angle O = \angle L$

18)  $\triangle DEF \cong \triangle FGH$

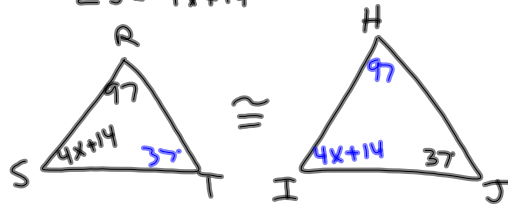


- (A)  $\triangle EDF \cong \triangle GFH$  ©  
 (B)  $\triangle FED \cong \triangle HGF$  X (C)  $\triangle FDE \cong \triangle FHG$

Ch. 4 PT 3

12)  $\triangle RST \cong \triangle HIJ$ ,

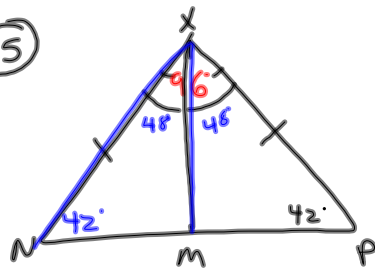
$\angle R = 97^\circ$   
 $\angle J = 37^\circ$  Find  $x$ .  
 $\angle S = 4x + 14$



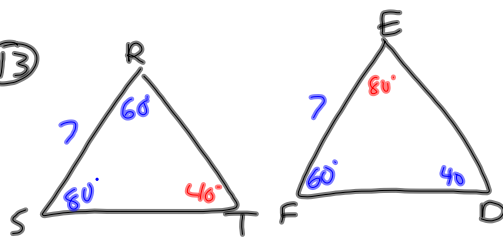
$$4x + 14 + 37 + 97 = 180$$

$$\begin{array}{r} 4x + 148 = 180 \\ - 148 \quad - 148 \\ \hline 4x = 32 \\ x = 8 \end{array}$$

15)

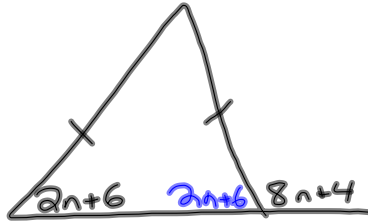


13)



ASA  
 AAS

16



$$2n+6 + 8n+4 = 180^\circ$$

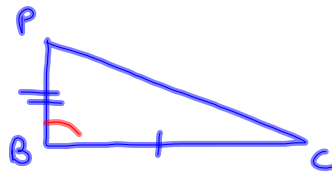
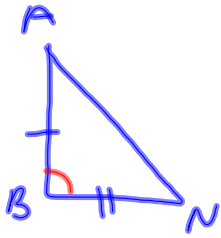
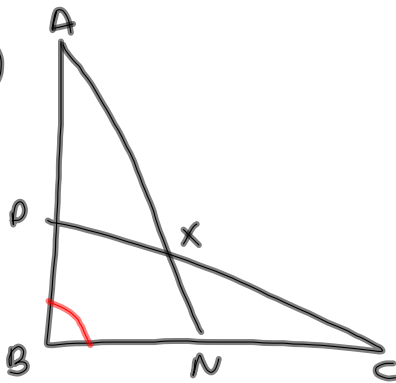
$$10n+10 = 180^\circ$$

$$\begin{array}{r} 10n+10 = 180^\circ \\ -10 \quad -10 \\ \hline 10n = 170 \end{array}$$

$$10n = 170$$

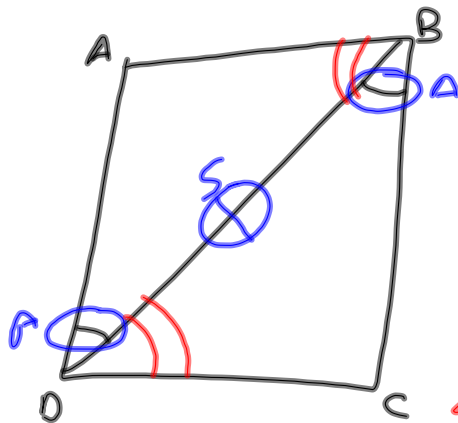
$$n = 17$$

17



SAS

19



Prove  $\cong$  by  
ASA

$$\angle COB \cong \angle AOD$$

(20)

$(x_1, y_1)$   
 $(2, 9)$

$$\perp \text{ to } y = \boxed{\frac{1}{2}}x + 10$$

$m = \frac{1}{2} \therefore \perp m = -2$

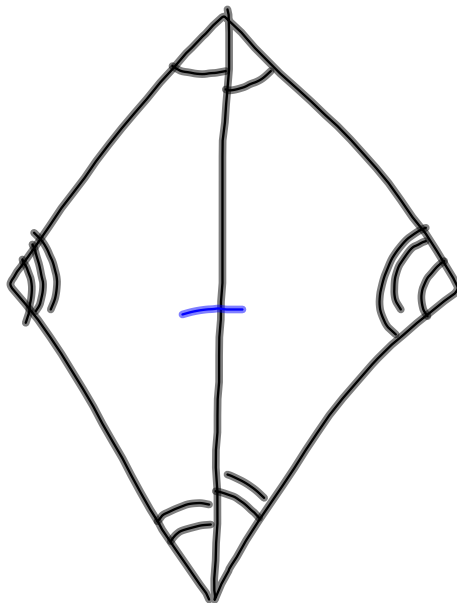
$$y - y_1 = m(x - x_1)$$

$$y - 9 = -2(x - 2)$$

$$y - 9 = -2x + 4$$

$$\begin{array}{r} +9 \qquad \qquad +9 \\ \hline y = -2x + 13 \end{array}$$

(18)



ASA

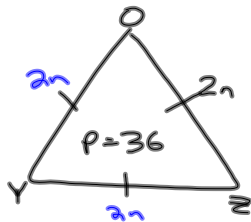
AAS

11-12-13

6<sup>th</sup> Geo

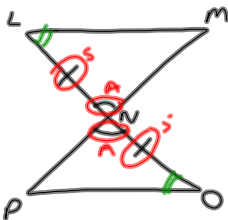
Questions from PT 2

9



$$\begin{aligned} 2n+2n+2n &= 36 \\ 6n &= 36 \\ n &= 6 \end{aligned}$$

15



ASA

$$\angle L = \angle O$$

20

$(4, 3)$   $(3, 6)$

$$y - y_1 = m(x - x_1)$$

$$\text{slope} = \frac{\Delta y}{\Delta x} = \frac{6-3}{3-4} = \frac{3}{-1} = -3$$

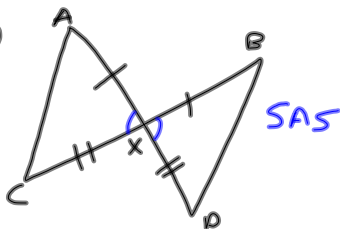
$$y - 3 = -3(x - 4)$$

$$y - 3 = -3x + 12$$

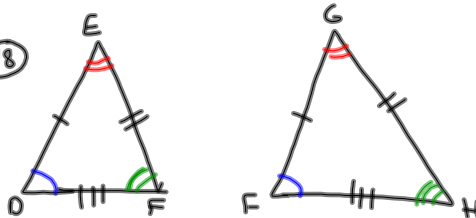
$$\begin{array}{r} y - 3 = -3x + 12 \\ +3 \quad \quad +3 \\ \hline \end{array}$$

$$y = -3x + 15$$

16



18



Ⓒ  $\triangle GFD \cong \triangle GHF$  ✓

Ⓓ  $\triangle FDE \cong \triangle FHG$  ✗

Ch. 4 PT 3 Questions

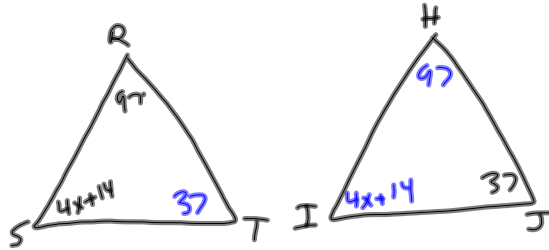
⑫  $\triangle RST \cong \triangle HIJ$

$\angle R = 97$

$\angle J = 37$

$\angle S = 4x + 14$

Find  $x$ .



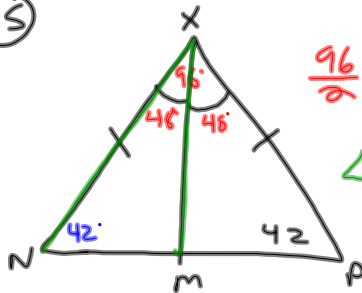
$4x + 14 + 37 + 97 = 180$

$4x + 148 = 180$

$4x = 32$

$x = 8$

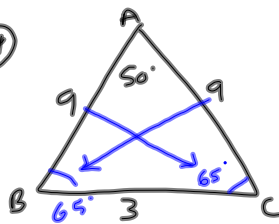
⑬



$\frac{96}{2} = 48$

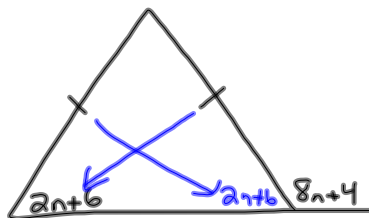
$\angle MXN = 48$

⑭



$\frac{130}{2} = 65$

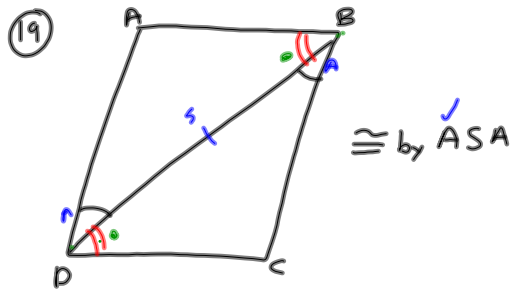
⑮



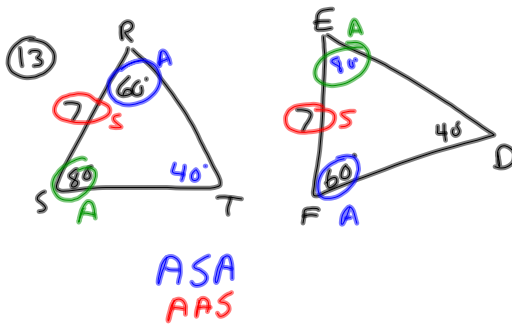
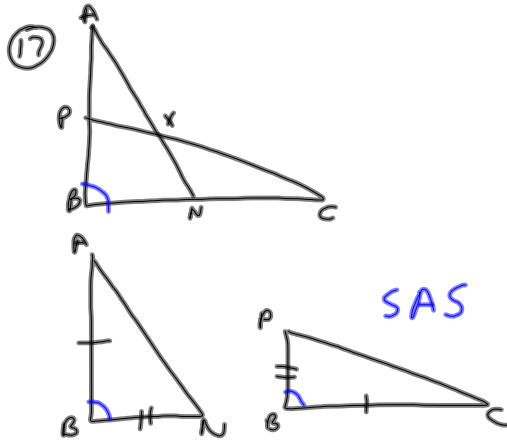
$2n + 6 + 8n + 4 = 180$

$10n + 10 = 180$

$n = 17$



- Ⓑ  $\angle BDC = \angle BAD$  ✗  
 ✓ Ⓐ  $\angle BDC = \angle ABD$



②⑩ (2, 9)

⊥ to  $y = \frac{1}{2}x + 10$   
 $m = \frac{1}{2}$

$\therefore \perp m = -2$

$y - y_1 = m(x - x_1)$

$y - 9 = -2(x - 2)$

$y - 9 = -2x + 4$

$\frac{+9}{+9} \quad \frac{+4}{+9}$   
 $y = -2x + 13$