

## Day 2 - Unit 4

13. Alt. Int. Angles (Converse)  $a \parallel b$   
14. none  
15. Corresponding Angles (Converse)  $l \parallel m$   
16. none  
17.  $\overleftrightarrow{AE} \parallel \overleftrightarrow{FB}$  Corres. Angles (Converse)  
18.  $\overleftrightarrow{EA} \parallel \overleftrightarrow{FB}$  Corres. Angles (Converse)  
19.  $\overleftrightarrow{EG} \parallel \overleftrightarrow{AC}$  Alt. Int. Angles (Converse)  
20.  $\overleftrightarrow{EG} \parallel \overleftrightarrow{AC}$  Same Side Interior (Converse)  
21.  $\overleftrightarrow{SH} \parallel \overleftrightarrow{TJ}$  Corres. Angles (Converse)  
22.  $\overleftrightarrow{AS} \parallel \overleftrightarrow{JT}$  Alt. Int. Angles (Converse)  
23.  $\overleftrightarrow{KN} \parallel \overleftrightarrow{PR}$  Same Side Interior (Converse)  
24.  $\overleftrightarrow{KN} \parallel \overleftrightarrow{PR}$  Perpendicular Transversal Theorem

### 25) Reasons

- 1) Given
- 2) Def. of Perpendicular lines
- 3) All Right Angles are congruent
- 4) Converse of Corresponding Angles Postulate

$$\begin{aligned} 26. \quad 9x - 4 &= 140 \\ 9x &= 144 \\ x &= 16 \end{aligned}$$

$$\begin{aligned} 27. \quad 8x + 4 &= 9x - 11 \\ -x &= -15 \\ x &= 15 \end{aligned}$$

$$\begin{aligned} 28. \quad 7x - 1 &= 90 \\ 7x &= 91 \\ x &= 13 \end{aligned}$$

$$\begin{aligned} 29. \quad 4 - 5x &= 7x + 100 \\ -12x &= 96 \\ x &= -8 \end{aligned}$$

$$\begin{aligned} 30. \quad 5x + 90 &= 14x + 9 \\ -9x &= -81 \\ x &= 9 \end{aligned}$$

$$\begin{aligned} 31. \quad 178 - 3x &= 7x - 38 \\ -10x &= -216 \\ x &= 21.6 \end{aligned}$$