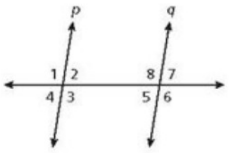
HW 3.3a p166 #1, 5, 6, 10, 12, 16, 18 , 22, 24, 26-29 & WS constructions

Use the Converse of the Corresponding Angles Postulate and the given information to show that $p \parallel q$.

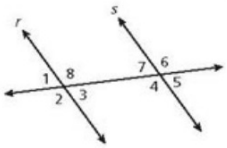
1. $\angle 4 \cong \angle 5$



Use the theorems and given information to show that $r \parallel s$.

5. $m\angle 3 + m\angle 4 = 180°$

6. $\angle 3 \cong \angle 7$

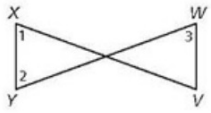


10. Complete the following two-column proof.

Given: $\angle 1 \cong \angle 2, \angle 3 \cong \angle 1$
Prove: $\overline{XY} \parallel \overline{WV}$

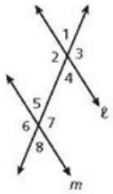
Proof:

Statements	Reasons
1. $\angle 1 \cong \angle 2, \angle 3 \cong \angle 1$	1. Given
2. $\angle 2 \cong \angle 3$	2. a. ___?___
3. b. ___?___	3. c. ___?___



Use the Converse of the Corresponding Angles Postulate and the given information to show that $\ell \parallel m$.

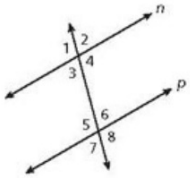
12. $\angle 3 \cong 7$



Use the theorems and given information to show that $n \parallel p$.

16. $\angle 3 \cong \angle 6$

18. $m\angle 4 + m\angle 6 = 180°$

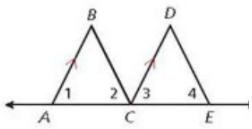


22. Complete the following two-column proof.

Given: $\overline{AB} \parallel \overline{CD}, \angle 1 \cong \angle 2, \angle 3 \cong \angle 4$
Prove: $\overline{BC} \parallel \overline{DE}$

Proof:

Statements	Reasons
1. $\overline{AB} \parallel \overline{CD}$	1. Given
2. $\angle 1 \cong \angle 3$	2. a. ___?___
3. $\angle 1 \cong \angle 2, \angle 3 \cong \angle 4$	3. b. ___?___
4. $\angle 2 \cong \angle 4$	4. c. ___?___
5. d. ___?___	5. e. ___?___

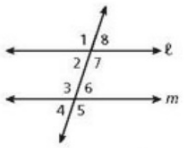


Name the postulate or theorem that proves that $\ell \parallel m$.

24. $\angle 8 \cong \angle 6$ **25.** $\angle 8 \cong \angle 4$

26. $\angle 2 \cong \angle 6$ **27.** $\angle 7 \cong \angle 5$

28. $\angle 3 \cong \angle 7$ **29.** $m\angle 2 + m\angle 3 = 180°$



Name_____

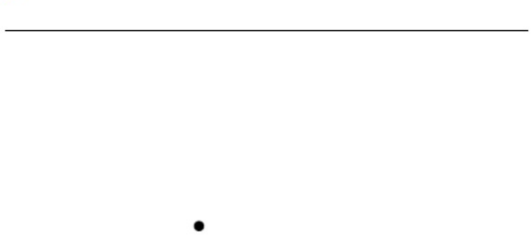
Constructing Parallel Lines

Date_____ Period____ Assn #:_____

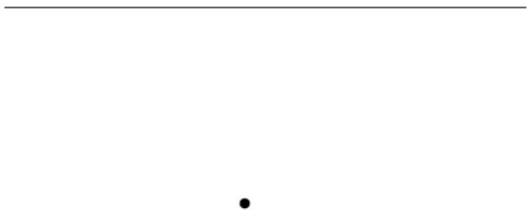
Construct a line segment through the given point parallel to the given line segment.

1)

2)



3)



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