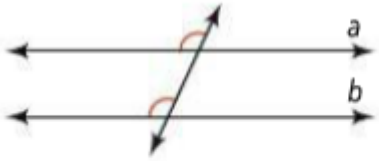
DAY 8 – 3.3 HOMEWORK

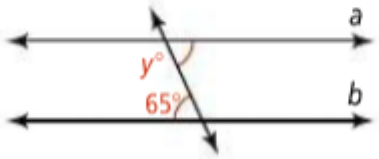
PAGE 160 #1-3, 7, 12-15, 17-27 ODD, 31

State the theorem or postulate that proves $a \parallel b$.

1.



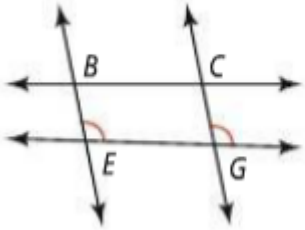
2.



3. What is the value of y for which $a \parallel b$ in Exercise 2?

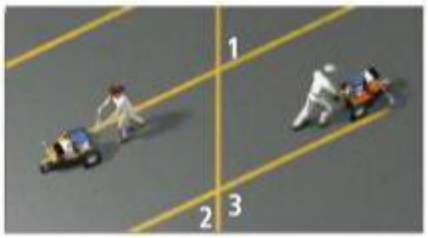
Which lines or segments are parallel? Justify your answer.

7.



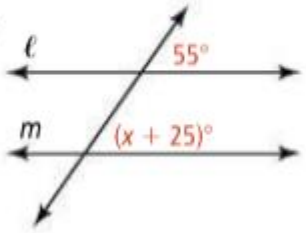
8.

12. Parking Two workers paint lines for angled parking spaces. One worker paints a line so that $m\angle 1 = 65$. The other worker paints a line so that $m\angle 2 = 65$. Are their lines parallel? Explain.

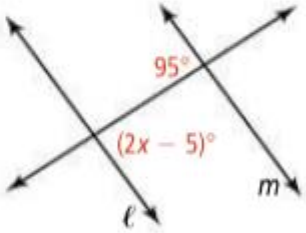


Algebra **Find the value of x for which $\ell \parallel m$.**

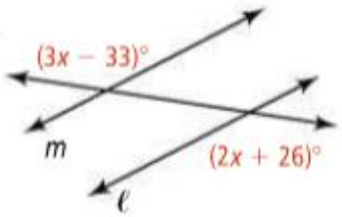
13.



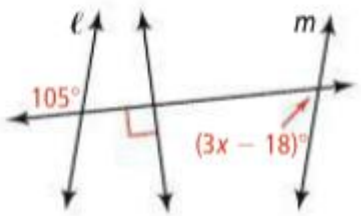
14.



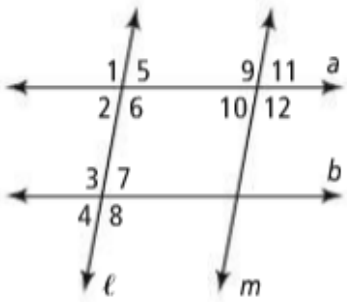
15.



16.



Developing Proof Use the given information to determine which lines, if any, are parallel. Justify each conclusion with a theorem or postulate.



17. $\angle 2$ is supplementary to $\angle 3$.

18. $\angle 1 \cong \angle 3$

19. $\angle 6$ is supplementary to $\angle 7$.

20. $\angle 9 \cong \angle 12$

21. $m\angle 7 = 65$, $m\angle 9 = 115$

22. $\angle 2 \cong \angle 10$

23. $\angle 1 \cong \angle 8$

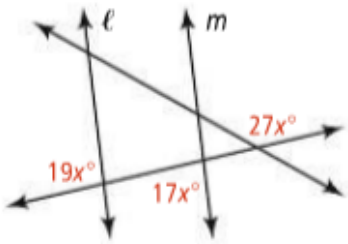
24. $\angle 8 \cong \angle 6$

25. $\angle 11 \cong \angle 7$

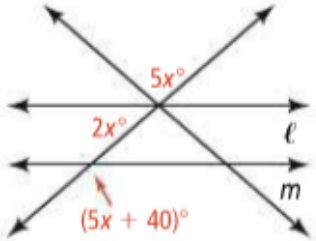
26. $\angle 5 \cong \angle 10$

Algebra Find the value of x for which $\ell \parallel m$.

27.



28.



Algebra Determine the value of x for which $r \parallel s$. Then find $m\angle 1$ and $m\angle 2$.

31. $m\angle 1 = 80 - x$, $m\angle 2 = 90 - 2x$