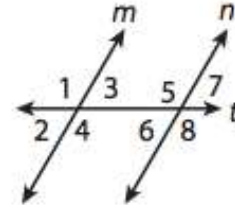


Parallel Lines Homework

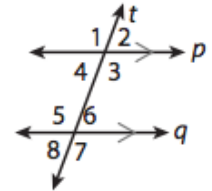
1. In the figure below, $m \parallel n$. Match the angle pairs with the correct label for the pairs. Indicate a match by writing the letter for the angle pairs on the line in front of the corresponding labels.



- | | | |
|------------------------------|-------|---------------------------|
| A. $\angle 4$ and $\angle 6$ | _____ | Corresponding Angles |
| B. $\angle 5$ and $\angle 8$ | _____ | Same-Side Interior Angles |
| C. $\angle 2$ and $\angle 6$ | _____ | Alternate Interior Angles |
| D. $\angle 4$ and $\angle 5$ | _____ | Vertical Angles |

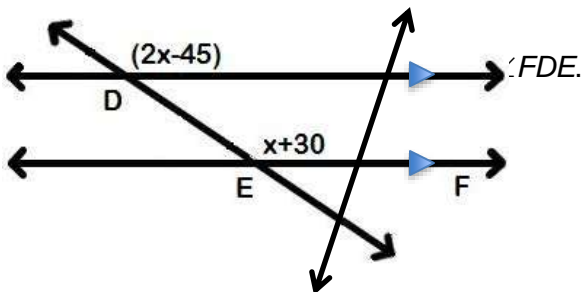
2. Complete the definition: A _____ is a line that intersects two coplanar lines at two different points.

Use the figure to find angle measures. In the figure, $p \parallel q$.

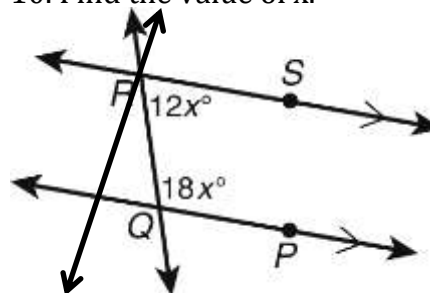


- | | |
|---|---|
| 3. Suppose $m\angle 4 = 82^\circ$. Find $m\angle 5$. | 4. Suppose $m\angle 3 = 105^\circ$. Find $m\angle 6$. |
| 5. Suppose $m\angle 3 = 122^\circ$. Find $m\angle 5$. | 6. Suppose $m\angle 4 = 76^\circ$. Find $m\angle 6$. |
| 7. Suppose $m\angle 5 = 109^\circ$. Find $m\angle 1$. | 8. Suppose $m\angle 6 = 74^\circ$. Find $m\angle 2$. |

9. Find the value of x .

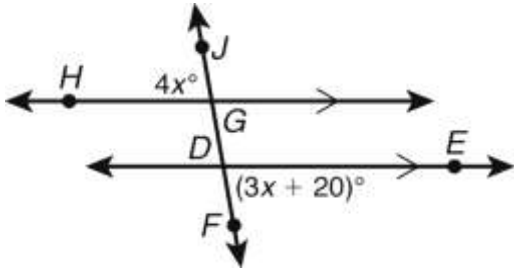


10. Find the value of x .

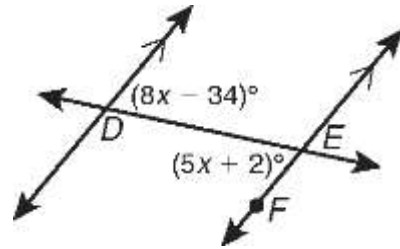


Parallel Lines Homework

11. Find the $m\angle JGH$.

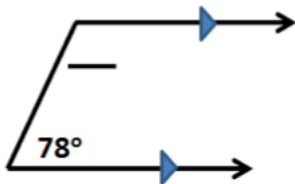


12. Find the $m\angle FED$.

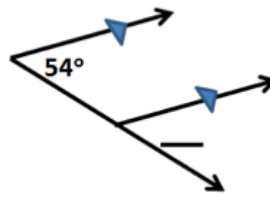


Angle Chasing. Fill in all of the blanks. Justify your answers.

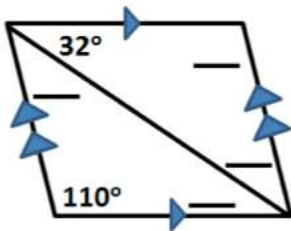
13.



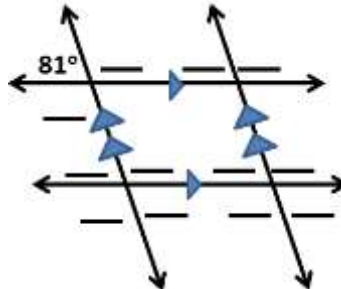
14.



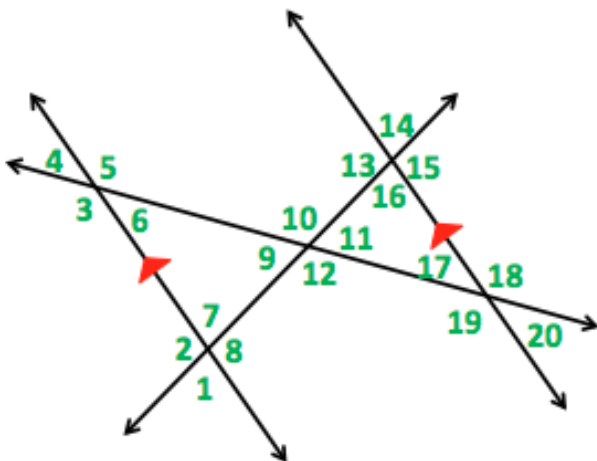
15.



16.



CHALLENGE!



a. Which angles MUST be congruent to angle 1?
Why?
Name all that apply.

b. Which angles MUST be congruent to angle 10?
Why?
Name all that apply.

c. Which angles MUST be congruent to angle 19?
Why?
Name all that apply.