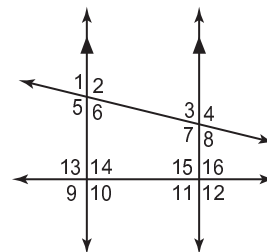


Skills Practice

Parallel Lines and Transversals

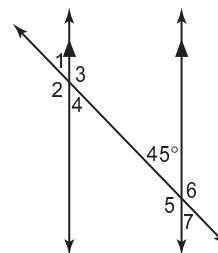
Identify each pair of angles as alternate interior, alternate exterior, consecutive interior, or vertical.

- | | |
|---|--|
| 1. $\angle 1$ and $\angle 6$
vertical | 2. $\angle 2$ and $\angle 3$
consecutive interior |
| 3. $\angle 2$ and $\angle 7$
alternate interior | 4. $\angle 1$ and $\angle 8$
alternate exterior |
| 5. $\angle 2$ and $\angle 5$
vertical | 6. $\angle 10$ and $\angle 11$
consecutive interior |
| 7. $\angle 13$ and $\angle 12$
alternate exterior | 8. $\angle 5$ and $\angle 4$
alternate exterior |
| 9. $\angle 3$ and $\angle 8$
vertical | 10. $\angle 14$ and $\angle 15$
consecutive interior |
| 11. $\angle 9$ and $\angle 14$
vertical | 12. $\angle 14$ and $\angle 11$
alternate interior |



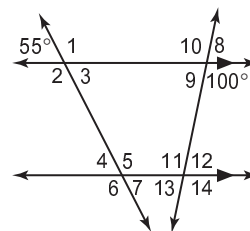
Find the measure of each angle. Give a reason for each answer.

- | | |
|---|--|
| 13. $\angle 7$ 45;
Vertical angles are congruent. | 14. $\angle 4$ 45;
Alternate interior angles are congruent. |
| 15. $\angle 3$ 135;
Consecutive interior angles are supplementary. | 16. $\angle 6$ 135;
Linear pairs are supplementary. |



Find the measure of each angle. Give a reason for each answer.

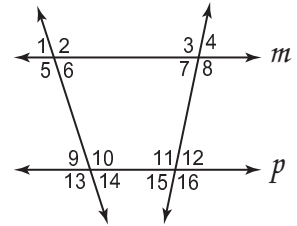
- | |
|--|
| 17. $\angle 1$ 125; Linear pairs are supplementary. |
| 18. $\angle 3$ 55; Vertical angles are congruent. |
| 19. $\angle 12$ 80; Consecutive interior angles are supplementary. |
| 20. $\angle 11$ 100; Alternate interior angles are congruent. |



Skills Practice

Transversals and Corresponding Angles

In the figure, $m \parallel p$. Name all angles congruent to the given angle. Give a reason for each answer.



1. $\angle 1$ $\angle 6$, vertical;
 $\angle 9$, corresponding;
 $\angle 14$, alternate exterior

2. $\angle 7$ $\angle 4$, vertical;
 $\angle 12$, alternate interior;
 $\angle 15$, corresponding

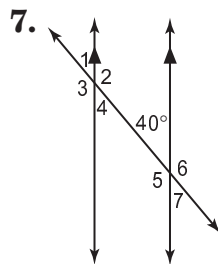
3. $\angle 13$ $\angle 10$, vertical;
 $\angle 5$, corresponding;
 $\angle 2$, alternate exterior

4. $\angle 8$ $\angle 3$, vertical;
 $\angle 11$, alternate interior;
 $\angle 16$, corresponding

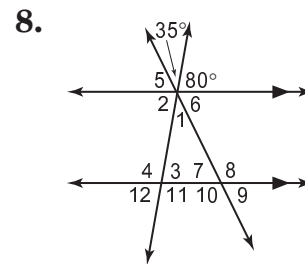
5. $\angle 9$ $\angle 14$, vertical;
 $\angle 6$, alternate interior;
 $\angle 1$, corresponding

6. $\angle 16$ $\angle 11$, vertical;
 $\angle 8$, corresponding;
 $\angle 3$, alternate exterior

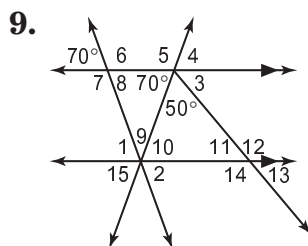
Find the measure of each numbered angle.



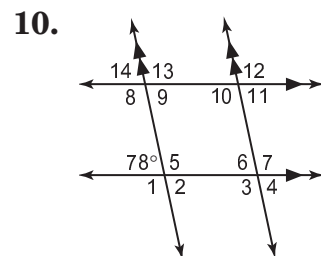
$m\angle 1 = 40$, $m\angle 2 = 140$, $m\angle 3 = 140$,
 $m\angle 4 = 40$, $m\angle 5 = 140$,
 $m\angle 6 = 140$, $m\angle 7 = 40$



$m\angle 1 = 35$, $m\angle 2 = 80$, $m\angle 3 = 80$,
 $m\angle 4 = 100$, $m\angle 5 = 65$,
 $m\angle 6 = 65$, $m\angle 7 = 65$, $m\angle 8 = 115$,
 $m\angle 9 = 65$, $m\angle 10 = 115$,
 $m\angle 11 = 100$, $m\angle 12 = 80$



$m\angle 1 = 70$, $m\angle 2 = 70$, $m\angle 3 = 60$,
 $m\angle 4 = 70$, $m\angle 5 = 110$,
 $m\angle 6 = 110$, $m\angle 7 = 110$, $m\angle 8 = 70$,
 $m\angle 9 = 40$, $m\angle 10 = 70$,
 $m\angle 11 = 60$, $m\angle 12 = 120$, $m\angle 13 = 60$,
 $m\angle 14 = 120$, $m\angle 15 = 70$



$m\angle 1 = 102$, $m\angle 2 = 78$, $m\angle 3 = 102$,
 $m\angle 4 = 78$, $m\angle 5 = 102$,
 $m\angle 6 = 78$, $m\angle 7 = 102$, $m\angle 8 = 102$,
 $m\angle 9 = 78$, $m\angle 10 = 102$,
 $m\angle 11 = 78$, $m\angle 12 = 102$,
 $m\angle 13 = 102$, $m\angle 14 = 78$