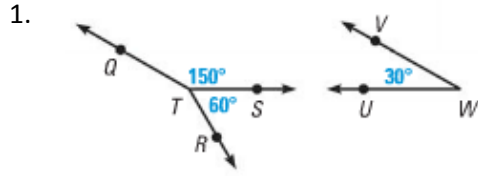


Name a pair of complementary angles and a pair of supplementary angles.



For questions 2 - 4, $\angle 1$ and $\angle 2$ are complementary angles. Given the measure of $\angle 1$, find $\angle 2$.

2. $m\angle 1 = 43^\circ$

3. $m\angle 1 = 89^\circ$

4. $m\angle 1 = 5^\circ$

For questions 5 - 7, $\angle 3$ and $\angle 4$ are supplementary angles. Given the measure of $\angle 3$, find $\angle 4$.

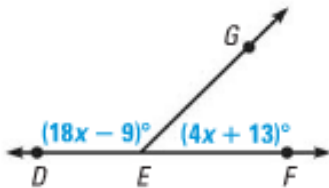
5. $m\angle 3 = 60^\circ$

6. $m\angle 3 = 155^\circ$

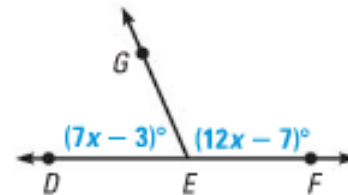
7. $m\angle 3 = 27^\circ$

For questions 8 - 9, find $m\angle DEG$ and $m\angle GEF$.

8.



9.



10. $\angle A$ and $\angle B$ are complementary. Find $m\angle A$ and $m\angle B$.

$$m\angle A = (3x + 2)^\circ$$

$$m\angle B = (x - 4)^\circ$$

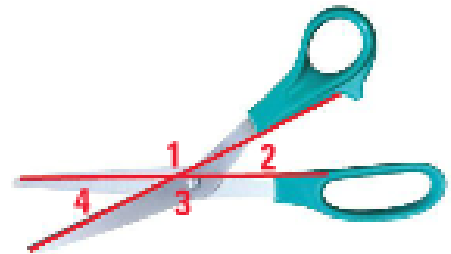
11. $\angle C$ and $\angle D$ are supplementary. Find $m\angle C$ and $m\angle D$.

$$m\angle C = (2x - 20)^\circ$$

$$m\angle D = (3x + 5)^\circ$$

For questions 12 and 13, use the diagram at the right.

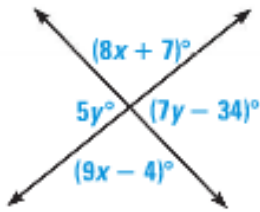
12. If $m\angle 1 = 145^\circ$, find $m\angle 2$, $m\angle 3$, and $m\angle 4$.



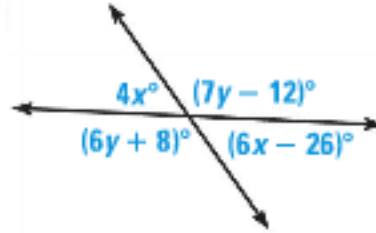
13. If $m\angle 4 = 37^\circ$, find $m\angle 1$, $m\angle 2$, and $m\angle 3$.

For questions 14 – 16, find the values of x and y.

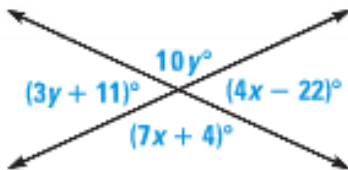
14.



15.



16.



Answers to 1.5 Homework on Angle Pairs.

- 1) Complementary: $\angle UWY$ and $\angle RTS$. Supplementary: $\angle UWY$ and $\angle QTS$
- 2) 47°
- 3) 1°
- 4) 85°
- 5) 120°
- 6) 25°
- 7) 153°
- 8) $x=8$, $m\angle DEG = 135^\circ$ and $m\angle GEF = 45^\circ$
- 9) $x = 10$, $m\angle DEG = 67^\circ$ and $m\angle GEF = 113^\circ$
- 10) $x = 23$, $m\angle A = 71^\circ$ and $m\angle B = 19^\circ$
- 11) $x = 39$, $m\angle C=58^\circ$ and $m\angle D=122^\circ$
- 12) $m\angle 2 = 35^\circ$, $m\angle 3 = 145^\circ$, $m\angle 4 = 145^\circ$
- 13) $m\angle 1 = 143^\circ$, $m\angle 2 = 37^\circ$, $m\angle 3 = 143^\circ$
- 14) $x = 11$, $y = 17$
- 15) $x = 13$, $y = 20$
- 16) $x = 13$, $y = 18$