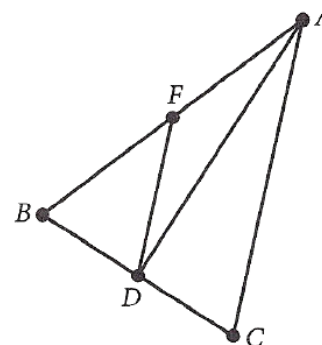


3.3 • Angles Formed by Parallel Lines

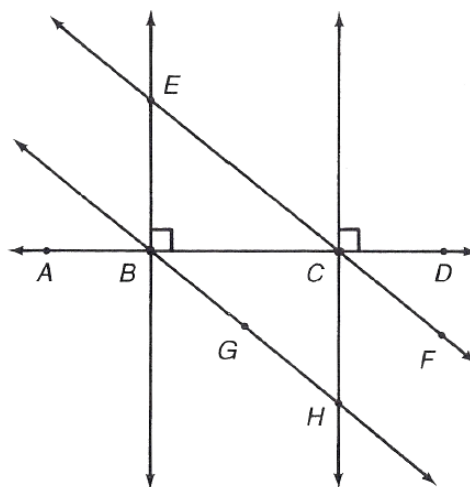
In the figure at the right, $\angle B \cong \angle C$, $m\angle BAC = 40^\circ$, $m\angle B = 70^\circ$, $m\angle BAD = 18^\circ$, and $\overline{FD} \parallel \overline{CA}$. Find the indicated measures.

1. $m\angle DAC$
2. $m\angle C$
3. $m\angle FDA$
4. $m\angle DFB$
5. $m\angle BDF$
6. $m\angle ADC$

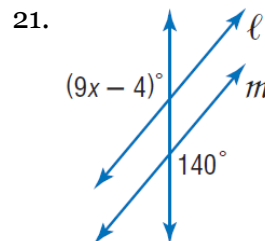
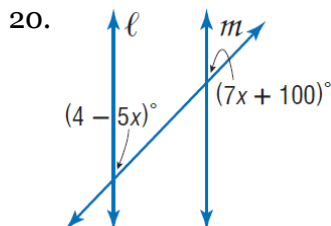
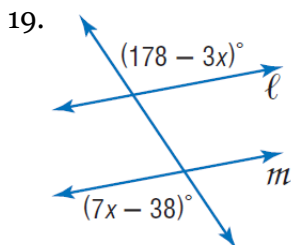
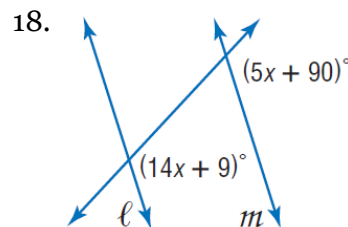
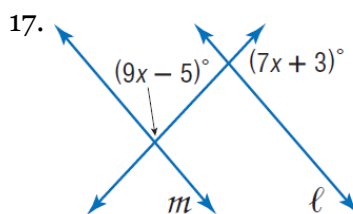
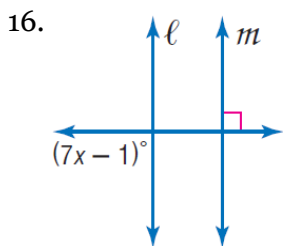


In the figure at the right, $\overline{EF} \parallel \overline{BH}$. Determine whether the following statements are true or false.

7. \overline{EF} intersects \overline{AD} at C
8. $\overline{HC} \perp \overline{DB}$
9. $\overline{EB} \parallel \overline{CH}$
10. $\overline{BG} \perp \overline{CH}$
11. $\overline{CF} \parallel \overline{BE}$
12. $\angle EBC$ is a right angle
13. $\angle DCE$ is a right angle
14. $m\angle HCB = 90^\circ$
15. $m\angle DCH = m\angle EBH$



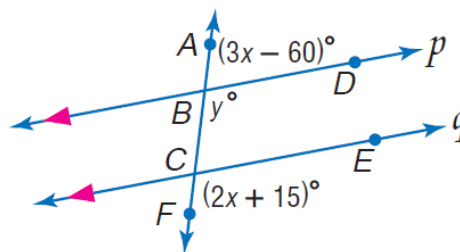
Given: $\ell \parallel m$. Identify the angle pair shown. Set up and solve an equation to find the value of x.



Given: $p \parallel q$. Identify the angle pair shown. Set up and solve an equation to find the value of x .

22. Identify the angle pair: $\angle ABD$ & $\angle ECF$

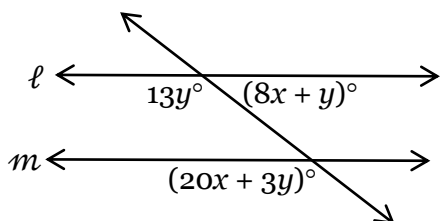
23. Set up and solve an equation to find the value of x .



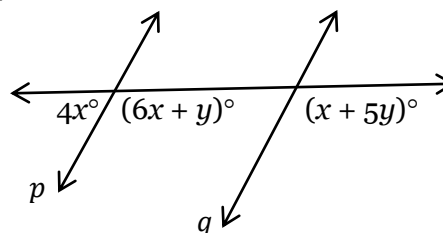
24. Find the value of y .

25. Find $m\angle BCE$

26. Given: $\ell \parallel m$. Set up and solve a system of equations to find the values of x and y .



27. Given: $p \parallel q$. Set up and solve a system of equations to find the values of x and y .



Set up and solve a quadratic equation to find the value of x (that makes sense). Then find $m\angle 1$ & $m\angle 2$.

