Find the measure of the third angle of a triangle given the measures of two angles.

1. 57 and 101

2. 72 and 72

3. x and 20

Find $m\angle 1$ and $m\angle 2$. Justify each answer.

4.

5.

6.

7.
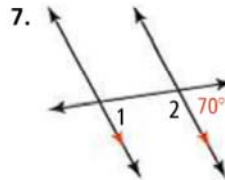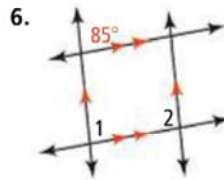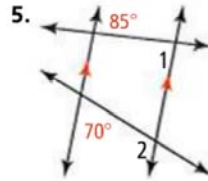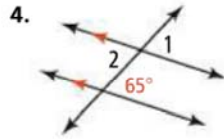
**Use the given information to write an equation of each line.**

14. slope -5, y-intercept -2

15. slope $\frac{1}{2}$, passes through $(4, -1)$

16. passes through $(1, 5)$ and $(3, 11)$

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

17.

18.
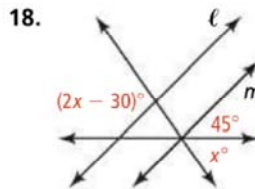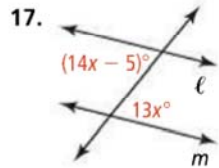
Graph each pair of lines. Tell whether they are *parallel, perpendicular,* or *neither.*

19. $y = 4x + 7$ and $y = -\frac{1}{4}x - 3$

20. $y = 3x - 4$ and $y = 3x + 1$

21. $y = x + 5$ and $y = -5x - 1$

22. Developing Proof Provide the reason for each step.

Given: $\ell \parallel m$, $\angle 2 \cong \angle 4$

Prove: $n \parallel p$

Statements	Reasons
1) $\ell \parallel m$	1) a. __?__
2) $\angle 1 \cong \angle 2$	2) b. __?__
3) $\angle 2 \cong \angle 4$	3) c. __?__
4) $\angle 1 \cong \angle 4$	4) d. __?__
5) $n \parallel p$	5) e. __?__