Find the values of the variables. Then find the measure of each labeled angle. Use algebraic equations.
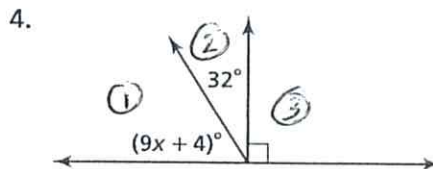
1.

① $(3x - 40)°$ $(2x - 10)°$ ②

2.

If you found the measure of an angle using a theorem or definition, state it.

① ②

$(6y - 10)°$ $(6y + 10)°$

3.

① ②

$(4z - 10)°$

$z°$ ③

4.

②

$32°$

① ③

$(9x + 4)°$

5.

②

$(7x + 3)°$

① $(4x + 1)°$ $65°$

③

6.

① $(4y)°$

$(6y)°$

②
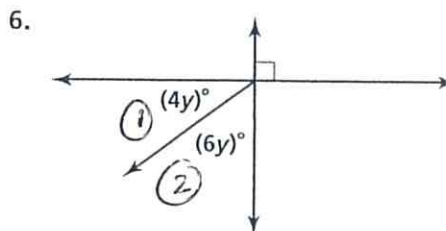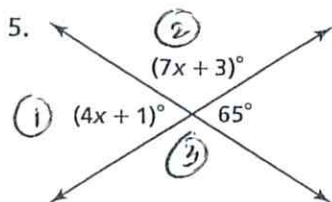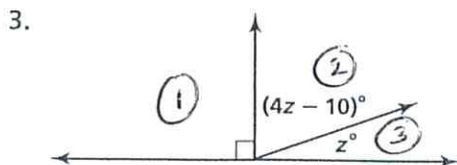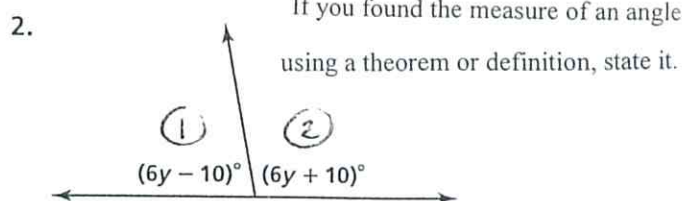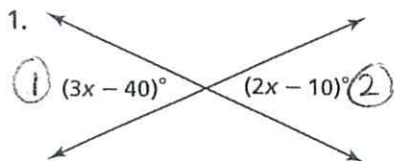
Find the measure of each angle. Set up + solve an algebraic equation.

7. $\angle A$ is three times as large as its supplement, $\angle B$.

8. $\angle A$ is one fourth as large as its supplement, $\angle B$.

9. $\angle A$ is five times as large as its complement, $\angle B$.

10. $\angle A$ is one eighth as large as its complement, $\angle B$.

Find the values of the variables.