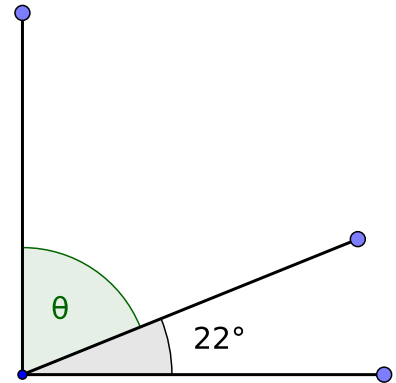


## Section 1.1 - Angles

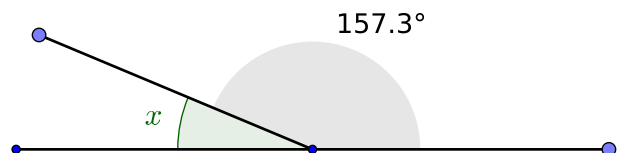
### COMPLEMENTARY AND SUPPLEMENTARY ANGLES

1. Find the complement and supplement of an angle measuring  $38^\circ$ .

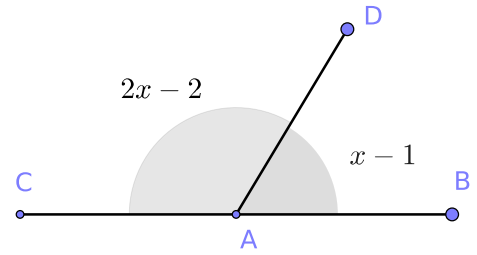
2. Find  $\theta$  in the picture below.



3. Find  $x$  in the picture below.



4. Find  $x$  in the picture below. Then find the angles  $\angle DAB$  and  $\angle DAC$ .



### DEGREES, MINUTES, AND SECONDS

In this section, we will gain practice on converting DMS angles to Decimal Degrees (DD) and vice-versa Decimal Degrees to DMS angles. We will also practice adding and subtracting angles in DMS.

5. Convert  $99^{\circ}22'47''$  to DD.

6.  $157^{\circ}48'39'' + 95^{\circ}36'42'' =$

7. Find the complement of an angle measuring  $38^{\circ}12'18''$ .

8. Convert  $22.128^\circ$  to DMS.

### COTERMINAL ANGLES

9. Find the coterminal angle of the least possible positive measure for an angle of  $1106^\circ$ .

10. Find the coterminal angle of least possible positive measure for an angle for an angle of  $-650^\circ$ .

### REVOLUTIONS PER SECOND APPLICATIONS

11. If a record spins at  $33 \frac{1}{3}$  revolutions per minute, through how many degrees does it rotate in 17 seconds?

12. If a gear rotates through  $187^\circ$  in 30 seconds, how many rotations does it make in an hour?