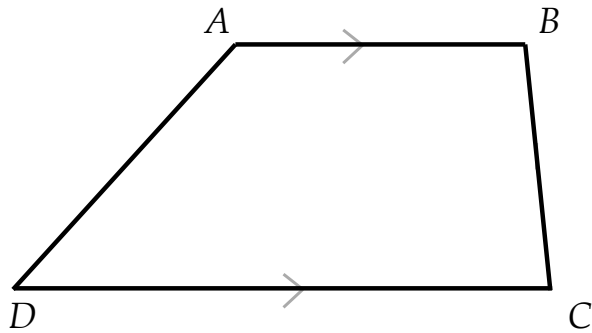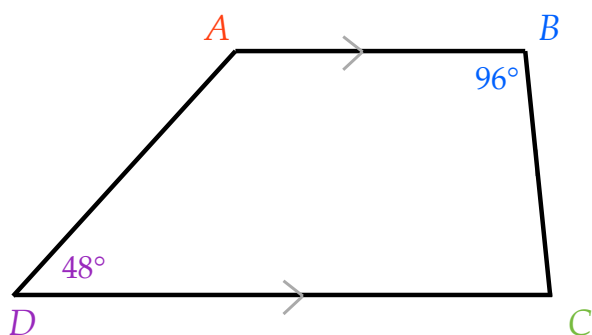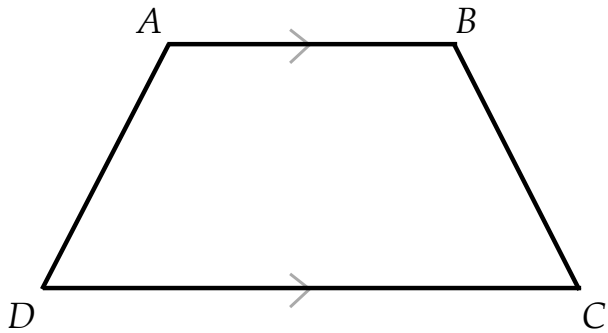If a quadrilateral is a trapezoid,
then the bases are parallel.

Determine $m\angle A$ and $m\angle C$

Given $ABCD$ is a trapezoid.

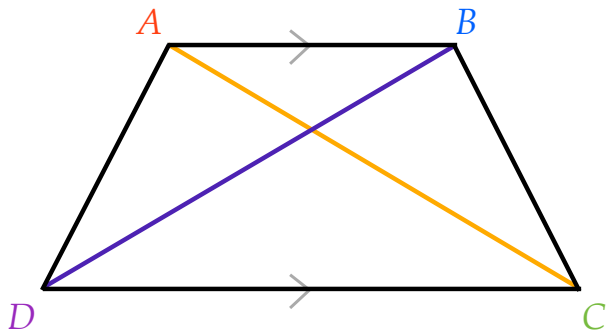If a quadrilateral is an isosceles trapezoid,
then the legs are congruent.

```
     A          B
    /----->-----\
   /             \
  /               \
 /------->---------\
D                   C
```

If a quadrilateral is an isosceles trapezoid,
then both pairs of base angles are congruent.

```
     A          B
    /----->-----\
   /             \
  /               \
 /------->---------\
D                   C
```
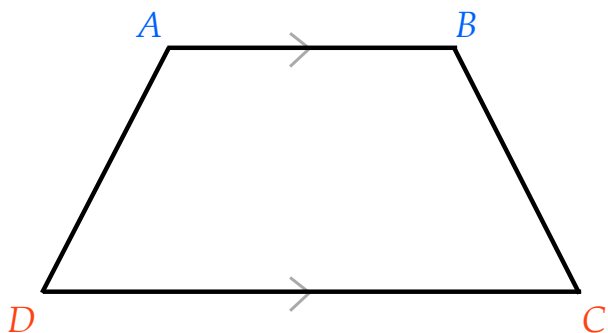
If a quadrilateral is an isosceles trapezoid,
then the diagonals are congruent.

Statements	Reasons

Given: $ABCD$ is an isosceles
trapezoid

Prove: $\overline{AC} \cong \overline{DB}$

Problems with Trapezoids
Pg. 3

Determine value for x, y, $m\angle A$, $m\angle B$ and $m\angle C$

Given $ABCD$ is an isosceles trapezoid.

A

B

$4y - 10$

$2y + 12$

$64°$

$8x°$

D

C