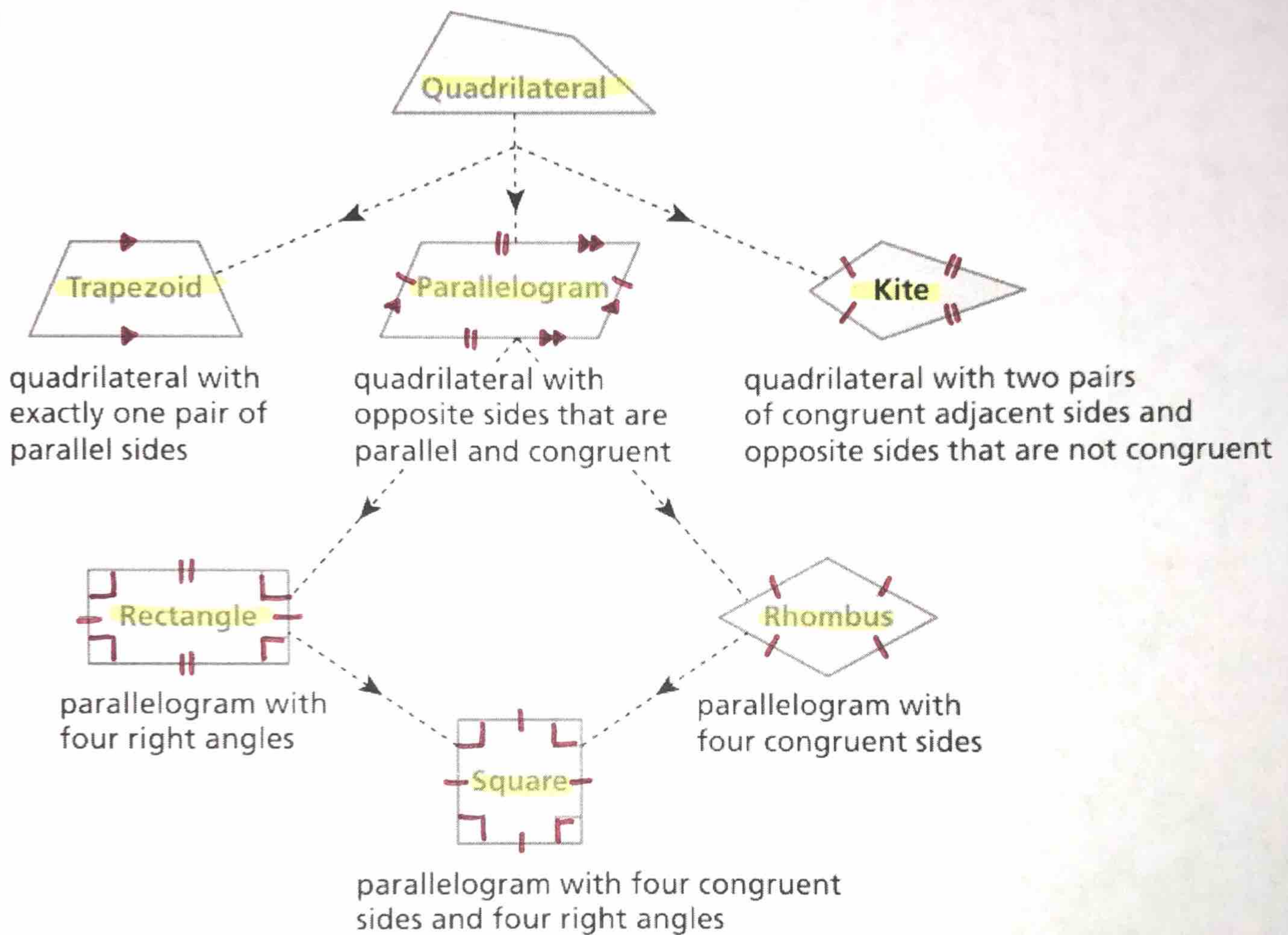


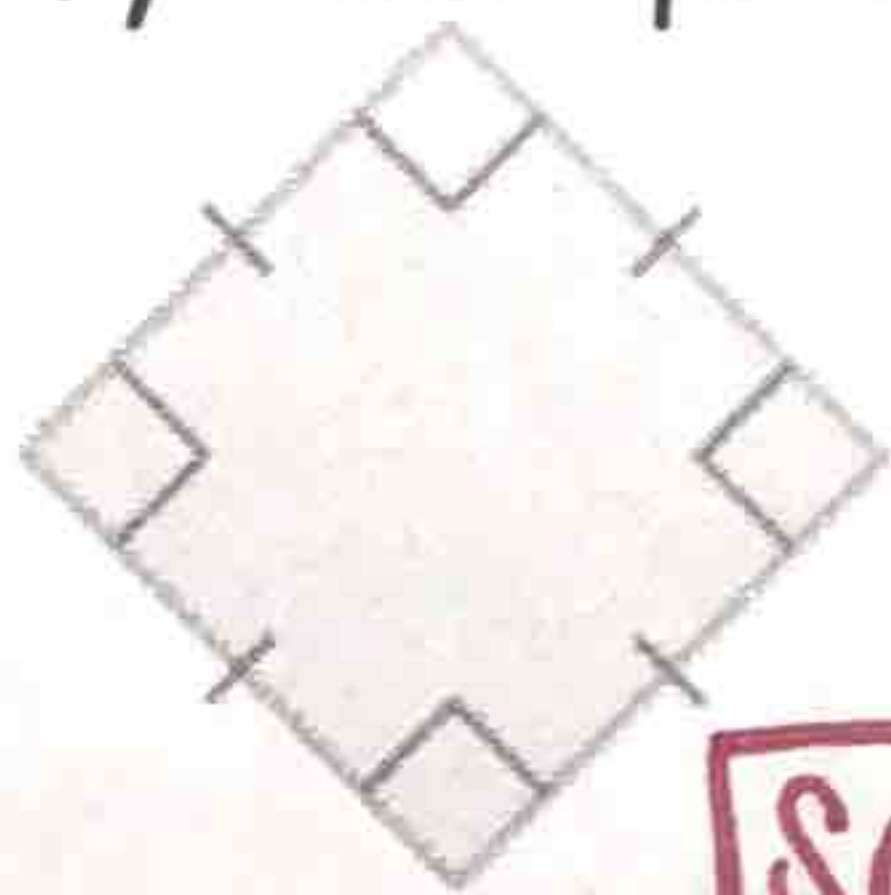
## 7.4 Quadrilaterals

**quadrilateral** - a polygon with four sides, when naming use most specific name



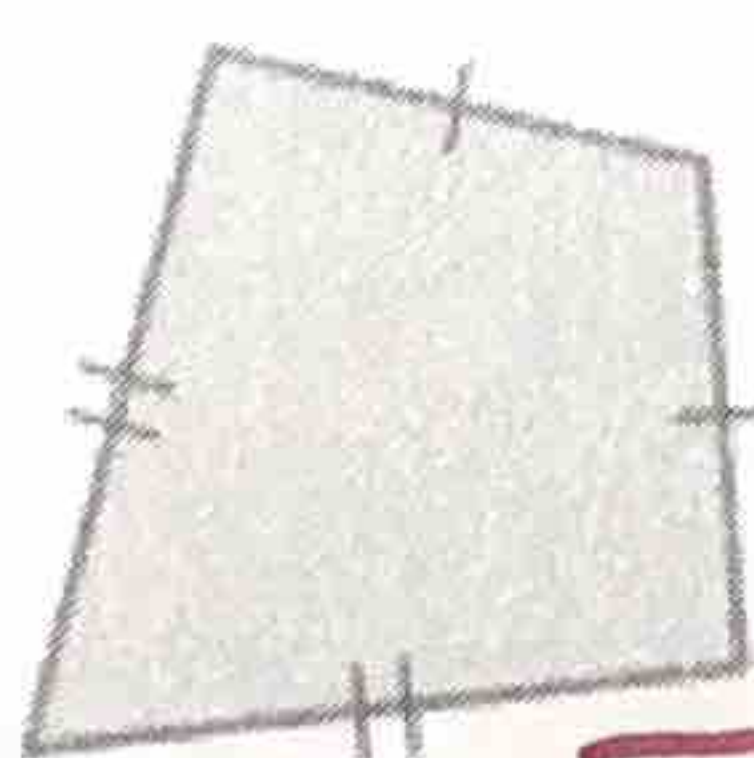
Classify each quadrilateral.

Ex 1:



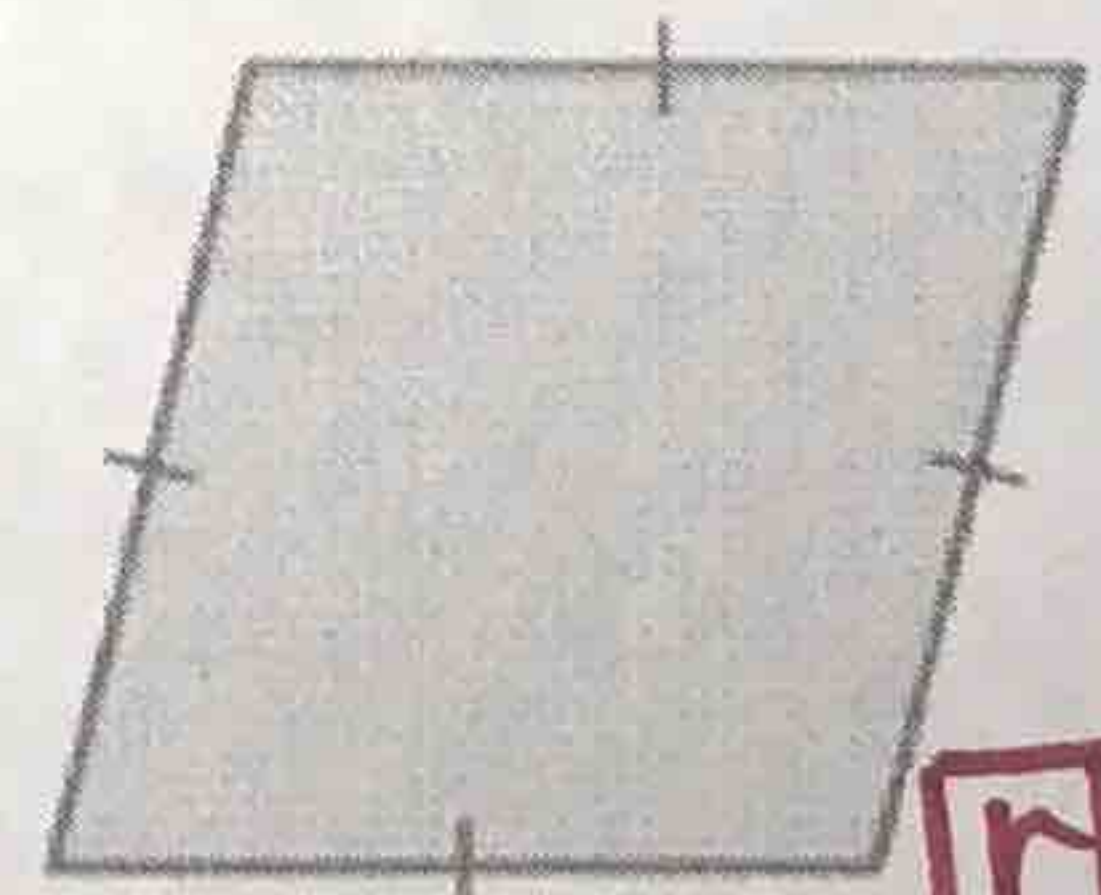
**square**

Ex 2:



**kite**

Ex 3:



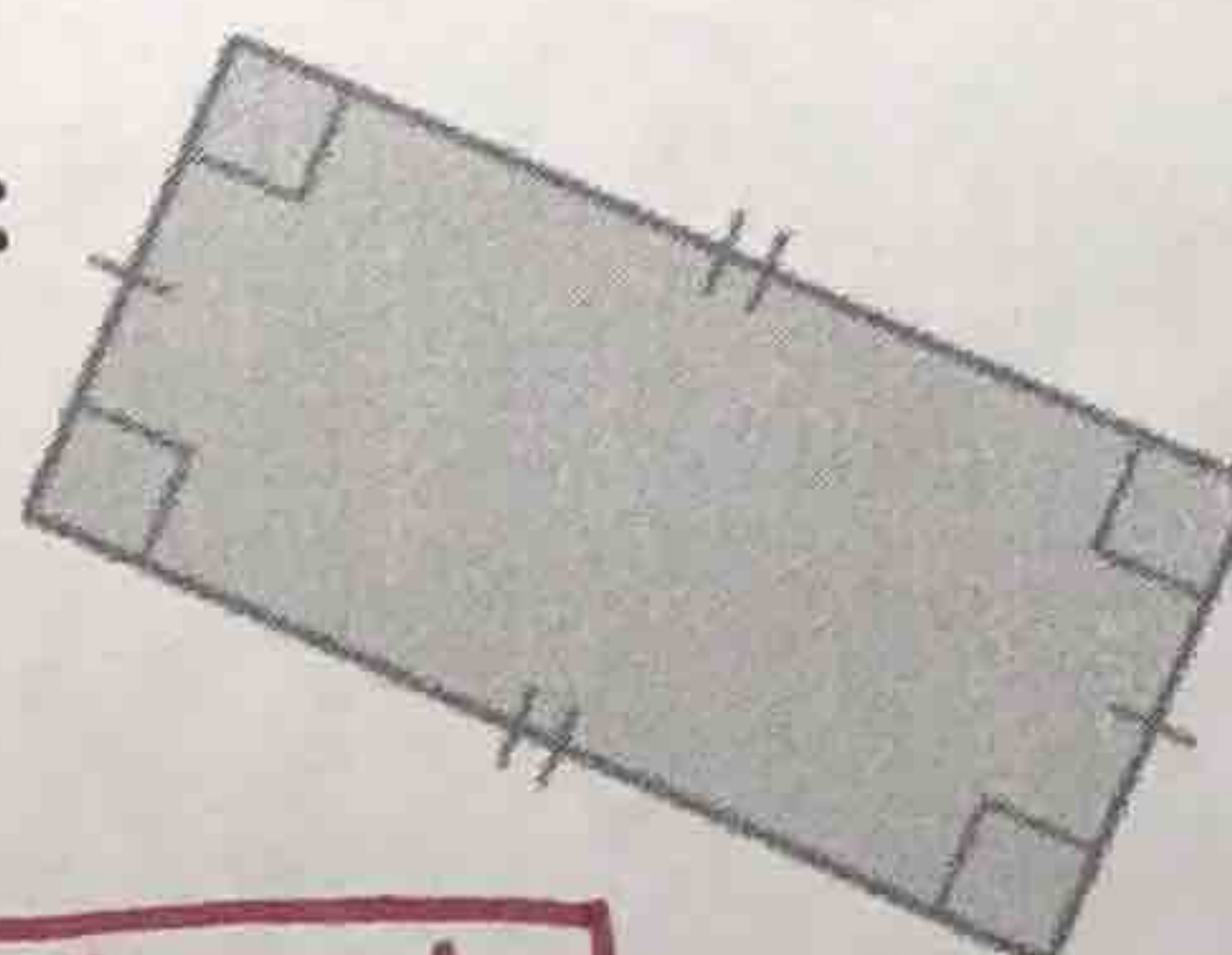
**rhombus**

Ex 4:



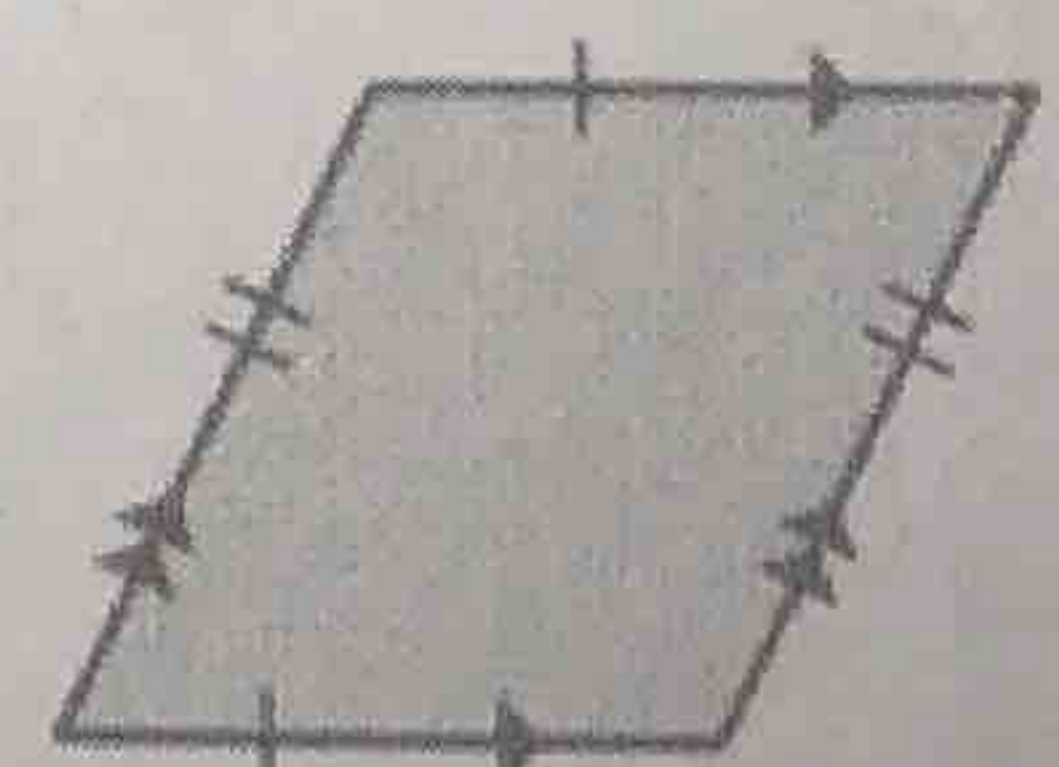
**trapezoid**

Ex 5:



**rectangle**

Ex 6:



**parallelogram**

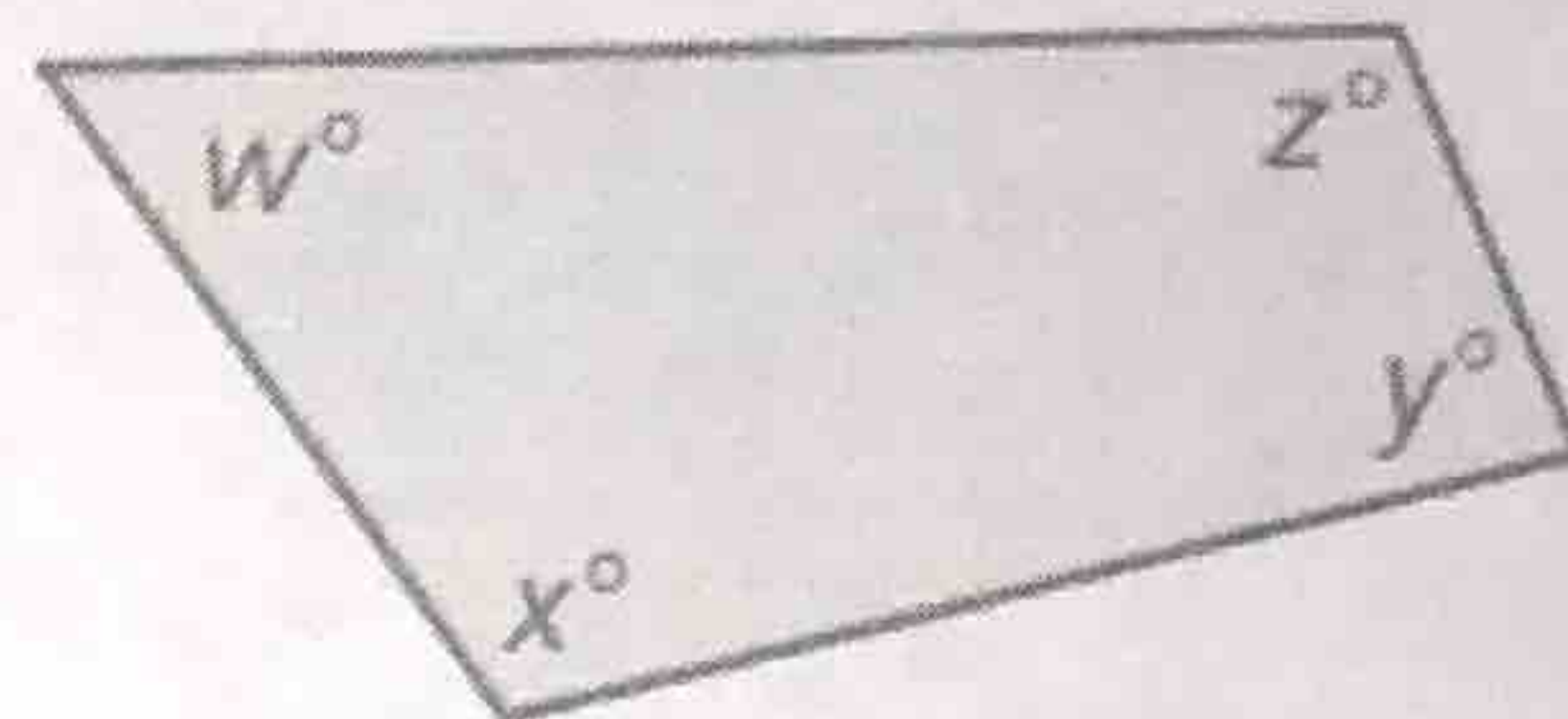


## Key Idea

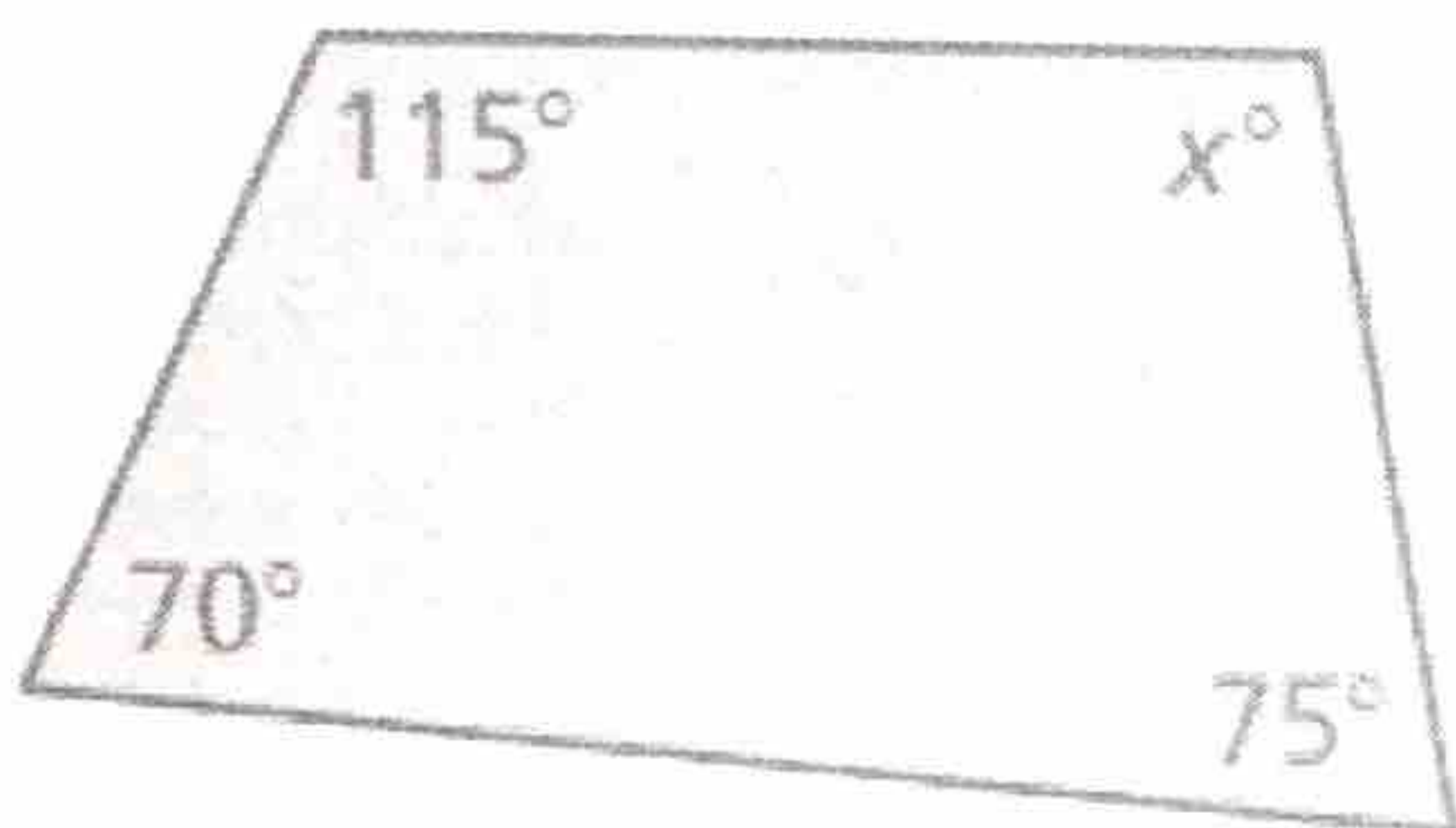
### Sum of the Angle Measures of a Quadrilateral

**Words** The sum of the angle measures of a quadrilateral is  $360^\circ$ .

**Algebra**  $w + x + y + z = 360$



Ex 7: Find the value of  $x$ .



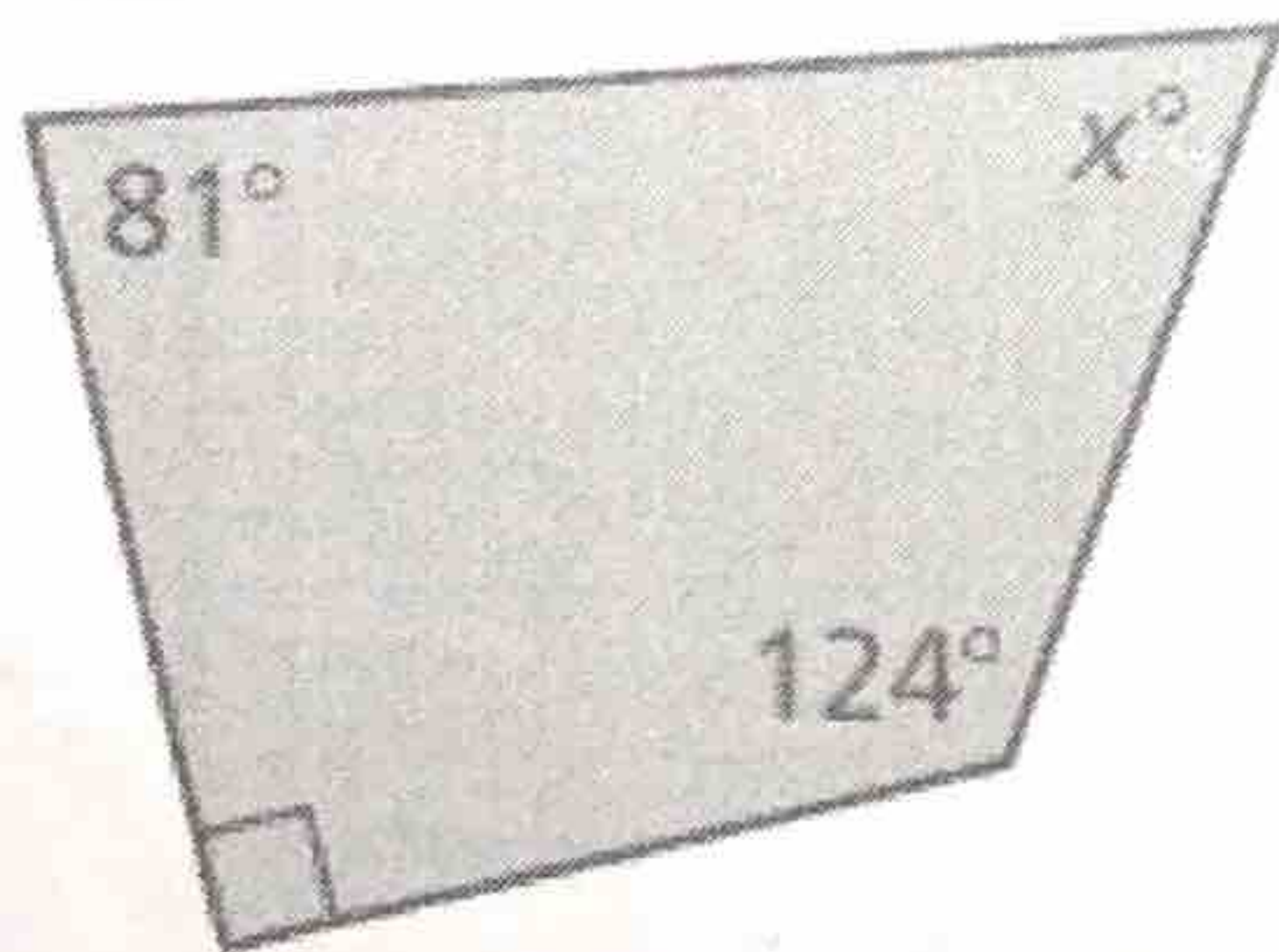
$$x + 115 + 70 + 75 = 360$$

$$x + 260 = 360$$

$$\begin{array}{r} x + 260 = 360 \\ - 260 \quad - 260 \\ \hline \end{array}$$

$$\boxed{x = 100}$$

Ex 8: Find the value of  $x$ .



$$x + 124 + 81 + 90 = 360$$

$$x + 295 = 360$$

$$\begin{array}{r} x + 295 = 360 \\ - 295 \quad - 295 \\ \hline \end{array}$$

$$\boxed{x = 65}$$