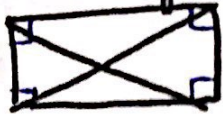
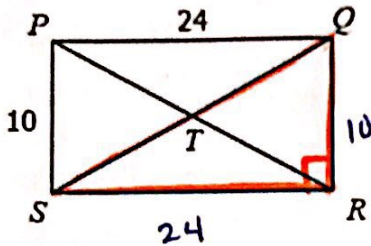


Main Ideas/Questions	Notes
<h1>PROPERTIES OF Rectangles</h1>  <p>PLUS THESE! ►</p>	<p>Rectangles have the same properties of parallelograms:</p> <ul style="list-style-type: none"> • Opposite sides are parallel • Opposite sides are congruent • Opposite angles are congruent • Consecutive angles are supplementary • Diagonals bisect each other
	<p>1. diagonals are congruent</p> <p>2. 4 right angles</p>

Directions: Each quadrilateral below is a rectangle. Find the missing measures.

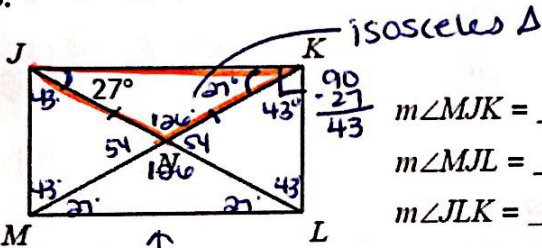
1.



$$\begin{aligned}
 QR &= \underline{10} \\
 SR &= \underline{24} \\
 SQ &= \underline{26} \\
 PR &= \underline{26} \\
 QT &= \underline{13}
 \end{aligned}$$

$$\begin{aligned}
 10^2 + 24^2 &= x^2 \\
 100 + 576 &= x^2 \\
 x &= 26
 \end{aligned}$$

3. $676 = x^2$



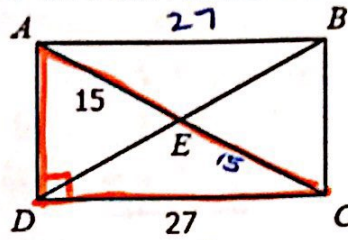
isosceles Δ

$$\begin{aligned}
 m\angle MJK &= \underline{90^\circ} \\
 m\angle MJL &= \underline{43^\circ} \\
 m\angle JLK &= \underline{43^\circ} \\
 m\angle KML &= \underline{27^\circ} \\
 m\angle MNL &= \underline{126^\circ}
 \end{aligned}$$

Δ sum

$$\begin{aligned}
 27 + 27 &= 54 \\
 180 - 54 &= 126
 \end{aligned}$$

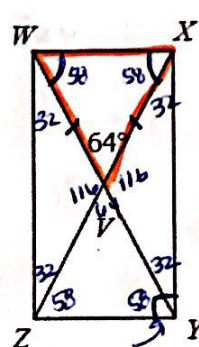
2. KEEP ALL NUMBERS IN SIMPLEST RADICAL FORM



$$\begin{aligned}
 AC &= \underline{30} \\
 BD &= \underline{30} \\
 BE &= \underline{15} \\
 AB &= \underline{27} \\
 BC &= \underline{3\sqrt{19}}
 \end{aligned}$$

$$\begin{aligned}
 27^2 + x^2 &= 30^2 \\
 729 + x^2 &= 900 \\
 x^2 &= 171 \\
 x &= \sqrt{171} = 3\sqrt{19}
 \end{aligned}$$

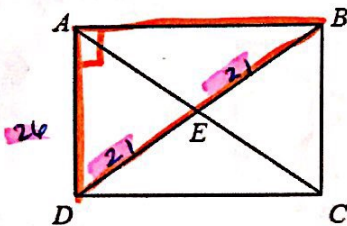
4.



$$\begin{aligned}
 180 - 64 &= 116 \\
 116/2 &= 58 \\
 m\angle WXY &= \underline{58^\circ} \\
 m\angle YXZ &= \underline{32^\circ} \\
 m\angle WVZ &= \underline{116^\circ} \\
 m\angle XWZ &= \underline{90^\circ} \\
 m\angle XZY &= \underline{58^\circ}
 \end{aligned}$$

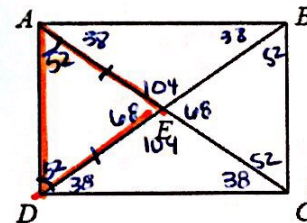
$$90 - 58 = 32$$

5. Given $DB = 42$, $AD = 26$, and $m\angle DAE = 52^\circ$.



$$\begin{aligned}
 AC &= \underline{42} \\
 EB &= \underline{21} \\
 BC &= \underline{26} \\
 AB &= \underline{8\sqrt{17}}
 \end{aligned}$$

$$\begin{aligned}
 26^2 + x^2 &= 42^2 \\
 676 + x^2 &= 1764 \\
 x^2 &= 1088 \\
 x &= \sqrt{1088} = 8\sqrt{17}
 \end{aligned}$$



$$\begin{aligned}
 m\angle ADC &= \underline{90^\circ} \\
 m\angle ABD &= \underline{38^\circ} \\
 m\angle BCA &= \underline{52^\circ} \\
 m\angle DEC &= \underline{104^\circ}
 \end{aligned}$$

$$\begin{aligned}
 52 + 52 &= 104 \\
 180 - 104 &= 76
 \end{aligned}$$

$$90 - 52 = 38$$