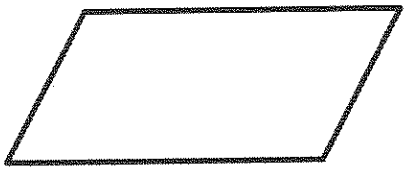
G5-M5-Lesson 17

1. Circle all of the words that could be used to name the figure below.

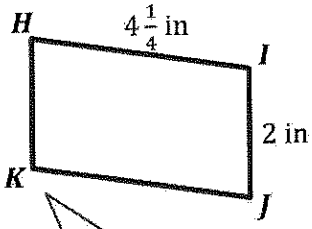
parallelogram triangle quadrilateral trapezoid square



This figure is a parallelogram because it's a quadrilateral with both pairs of opposite sides parallel.

This figure is a trapezoid because it's a quadrilateral with at least one pair of opposite sides parallel.

2. $HIJK$ is a parallelogram not drawn to scale.



This is $\angle HKJ$.

a. Using what you know about parallelograms, give the lengths of $\overline{KJ}$ and $\overline{HK}$.

$KJ =$ $4\frac{1}{4}$ in $HK =$ 2 in

I know that opposite sides of a parallelogram are equal in length. $HI = KJ$.

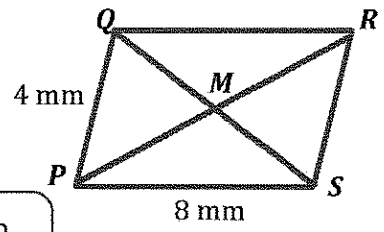
b. $\angle HKJ = 99°$. Use what you know about angles in a parallelogram to find the measure of the other angles.

I know that opposite angles of a parallelograms are equal in measure.

$\angle IHK =$ 81 ° $\angle JIH =$ 99 ° $\angle KJI =$ 81 °

I know that angles that are next to one another, or adjacent, add up to 180°.
$180° - 99° = 81°$

3. $PQRS$ is a parallelogram not drawn to scale. $PR = 10$ mm and $MS = 4.5$ mm. Give the lengths of the following segments:



$PM =$ 5 mm $\qquad QS =$ 9 mm

I know that the diagonals of a parallelogram bisect, or cut one another in two equal parts. So the length of $\overline{PM}$ is equal to half the length of $\overline{PR}$.