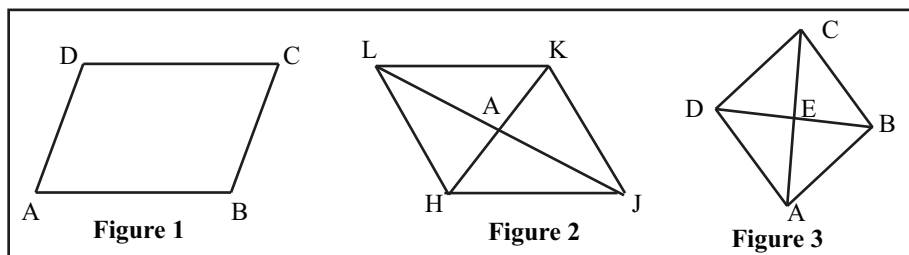


Handout 1: The Quad Squad



Use Fig 1 for questions 1-3.

1. Which parts of parallelogram $ABCD$ are congruent?
2. In parallelogram $ABCD$, if $m\angle A = 60^\circ$, what is $m\angle C$?
3. In parallelogram $ABCD$, if $m\angle B = 50^\circ$, what is the sum of the internal angles of the parallelogram?

For problems 4-6, refer to the parallelogram in Figure 2.

4. Which parts of parallelogram $HJKL$ are congruent?
5. If $KA = 20$ cm and $HA = x + 7$, what is the value of x ?

6. If $KA = 2x + 7$ and $HA = 3x - 1$, what is the length of \overline{HK} ?

For problems 7-10, refer to the rhombus in Figure 3.

7. If $DB = 6$ in and $CA = 8$ in, what is the length of \overline{CB} ?
8. If the perimeter of the rhombus is 40 cm and $DE = 6$ cm, what is the length of \overline{CB} ?
9. If the perimeter of $\triangle ABD$ is 36 ft and $DB = 10$, what is the perimeter of $\triangle ABC$?
10. If $m\angle DAE = 25^\circ$, what is the measure of $\angle DEC$?