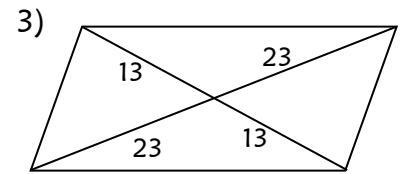
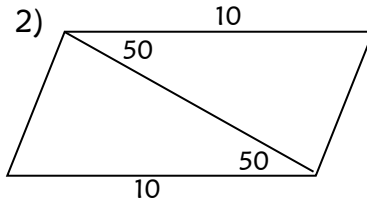
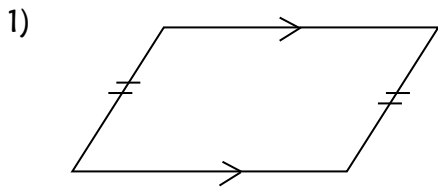


6.2 & 6.3 Parallelograms Study Guide

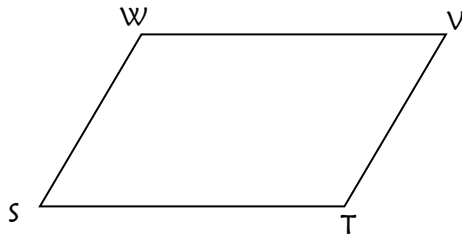
For 1-7, Objective 6.2 b: use properties of a parallelogram to solve coordinate and algebraic problems.
 Try the problems first, then rate yourself on a scale of 1 to 5. 1 2 3 4 5

1-3 Determine if each shape is a parallelogram. If so, explain why.



4) Given: WSTV is a parallelogram
 $WS = x + 5$
 $WV = x + 9$
 $VT = 2x + 1$

Find: the perimeter of WSTV

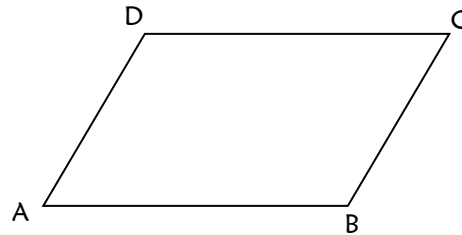


5) Given: ABCD is a parallelogram:

$$\angle A = x^2$$

$$\angle D = 3x$$

Find: $m\angle D$ and $m\angle C$



6) Given: Parallelogram STAR, list the pairs of sides that are congruent to each other
 (Hint: Draw a diagram).

7) Choose Always, Sometimes, or Never... A quadrilateral is a parallelogram if:

- _____ a) Diagonals are congruent.
- _____ b) One pair of opposite Sides are congruent and one pair of opposite sides are parallel.
- _____ c) Each pair of consecutive angles are Supplementary.
- _____ d) All angles are right angles.

For 8, Objective 6.2 a: Given a parallelogram, prove its properties in a two column proof.

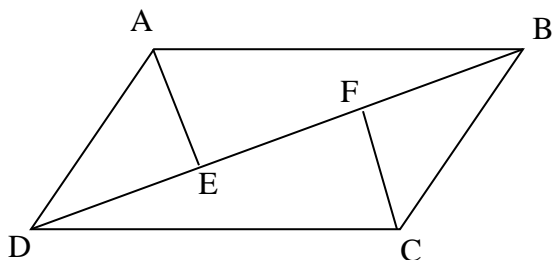
Try the proof first, then rate yourself on a scale of 1 to 5.

1 2 3 4 5

8) Given: ABCD is a Parallelogram

$$\overline{DE} \cong \overline{BF}$$

Prove: $\overline{AE} \cong \overline{CF}$



For 9, Objective 6.3 a: Prove a quadrilateral is a parallelogram using a two column proof.

Try the proof first, then rate yourself on a scale of 1 to 5.

1 2 3 4 5

9) Given: E is the midpt. of \overline{BD}

$$\angle ADE \cong \angle CBE$$

Prove: ABCD is a Parallelogram

