

Unit 7 Review

Name _____

1. Using rectangle PRST

a. Name all congruent segments.

_____ \cong _____ \cong _____ \cong _____
 _____ \cong _____, _____ \cong _____, _____ \cong _____

b. Name all congruent angles

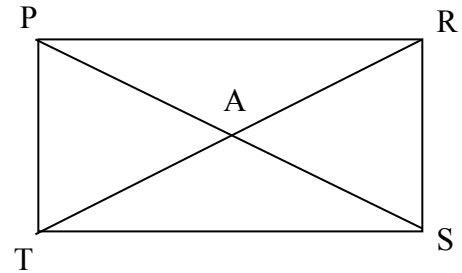
_____ \cong _____ \cong _____ \cong _____
 _____ \cong _____ \cong _____ \cong _____
 _____ \cong _____ \cong _____ \cong _____

c. Name all parallel lines

_____ \parallel _____, _____ \parallel _____

d. Name all perpendicular lines

_____ \perp _____, _____ \perp _____, _____ \perp _____, _____ \perp _____



2. Using square ABCD

a. Name all congruent segments

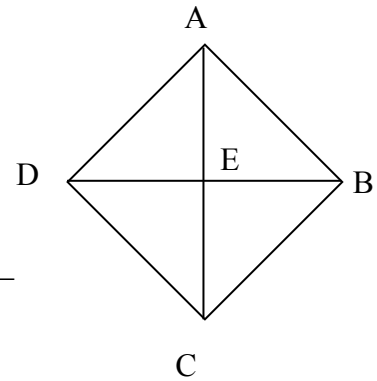
_____ \cong _____ \cong _____ \cong _____ _____ \cong _____
 _____ \cong _____ \cong _____ \cong _____

b. Name all the right angles

_____, _____, _____, _____, _____, _____, _____, _____

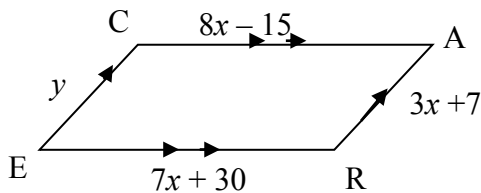
c. Name the parallel lines

_____ \parallel _____, _____ \parallel _____



Label the polygon. Solve for the indicated part.

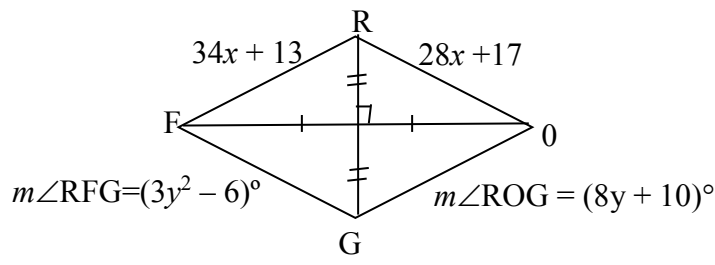
3. CARE is a _____



$x =$ _____ $CA =$ _____

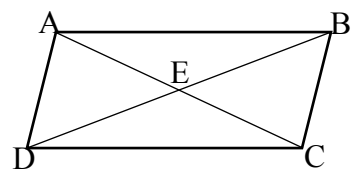
$y =$ _____ $AR =$ _____ If the slope of \overline{CE} is $\frac{5}{3}$, then the slope of \overline{AR} is _____

4. FROG is a _____



$x =$ _____ FR _____
 $y =$ _____ $m\angle RFG =$ _____
 $m\angle FGO =$ _____

5. Given: $AB \cong CD, \angle ABE \cong \angle CDE$
 Prove: ABCD is a parallelogram



| Statement | Reason |
|------------------------------------|--------|
| $AB \cong CD$ | |
| $\angle ABE \cong \angle CDE$ | |
| $AB \parallel CD$ | |
| \therefore ABCD is parallelogram | |

6. Given: QRST is a parallelogram, X is the midpoint of QS
 Prove: Diagonals bisect each other in a parallelogram

| Statement | Reason |
|---|--------|
| QRST is a parallelogram, X is the midpoint of QS | |
| $QT \parallel SR$ | |
| $QX \cong SX$ | |
| $\angle QTX \cong \angle SRX$ | |
| $\angle TQX \cong \angle RSX$ | |
| $\Delta QTX \cong \Delta SRX$ | |
| $TX \cong RX$ | |
| X is the midpoint of RT | |
| \therefore Diagonals bisect each other | |

- A) Determine the type of quadrilateral and justify your reasoning.
 - B) Find the perimeter and area of the quadrilateral.
7. $A(0, -4)$, $B(-6, 1)$, $C(3, 7)$, and $D(9, 2)$

8. $E(0, -2)$, $F(-3, 0)$, $G(-1, 3)$, and $H(2, 1)$