Name _____
Date_____
Period_____

Define the following vocabulary words.

Adjacent angles

_____

Vertical angles

_____

Perpendicular

_____

Parallel

_____

Parallelogram

_____

Quadrilateral

_____

Rhombus

_____

Trapezoid

_____

Reflection symmetry

_____

Rotation symmetry

_____

Translation

_____

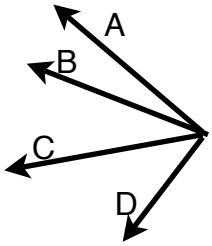
Isosceles Triangle

_____

1) What angle is adjacent to the angle AZB?

2) What angle is adjacent to the angle AZC?

3) If AZB is 20˚ and BZC is 35˚ and AZD is a right angle. What is the measure of CZD?

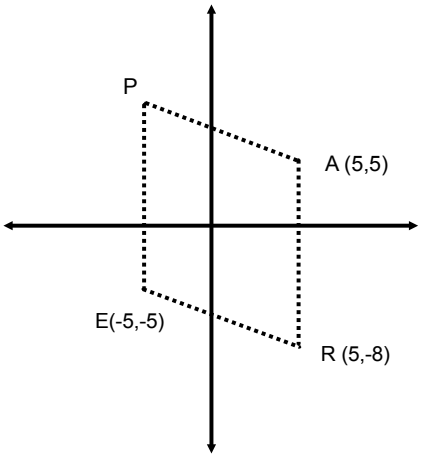


1) _____

2) _____

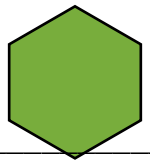
3) _____

4) If PARE is a parallelogram then find the coordinates of point P



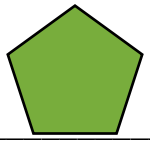
4) _____

5) Draw in the lines of symmetry.



5) _____

6) Draw in the lines of symmetry.

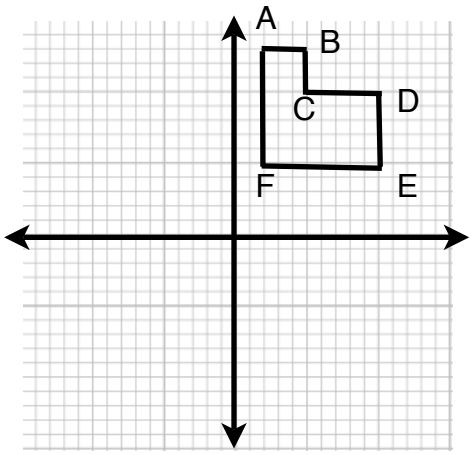


6) _____

7) Reflect ABCDEF over the y axis.

8) Reflect ABCDEF over the x axis.

9) Redraw ABCDEF with a translation of <-10, -15>

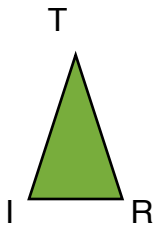


7)
8)
9)

10) Write a vertex matrix of the vertices in problem 9.

10)

11) the Δ TRI is an isosceles triangle. The measure of angle T is 35˚. What is the measure of angle R?



11) _____

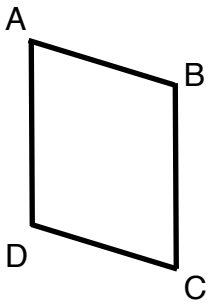
12) _____

13) _____

12) Parallelogram ABCD. The measure of angle A is 46˚. What is the measure of angle C?

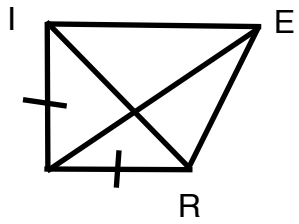
13) What is the measure of angle B?

14) What is the measure of angle D?



14) _____

15) Find the area of ΔTRE. Given that ΔTRI is isosceles, line segment TR is 10 units, and line segment EI is parallel to line segment TR.



15) _____

16) Multiply:

$$\begin{bmatrix} -1 & 0 \\ 0 & 1 \end{bmatrix} \bullet \begin{bmatrix} 2 & 4 & 3 \\ 6 & 3 & -5 \end{bmatrix}$$

16) _____

17) Multiply:

$$\begin{bmatrix} 0 & -1 \\ 1 & 0 \end{bmatrix} \bullet \begin{bmatrix} 1 & 3 & -2 \\ 5 & -3 & 2 \end{bmatrix}$$

17)_____

18) Multiply:

$$\begin{bmatrix} 0 & -1 \\ 1 & 0 \end{bmatrix} \bullet \begin{bmatrix} 2 & 1 & -1 \\ 2 & -6 & 3 \end{bmatrix}$$

18)_____

19) Find the area of ΔABC using the encasement strategy on page 357 of the math book.