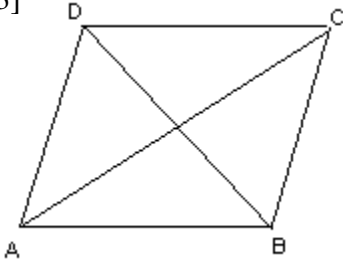


Name: _____
Date: _____
Class: _____

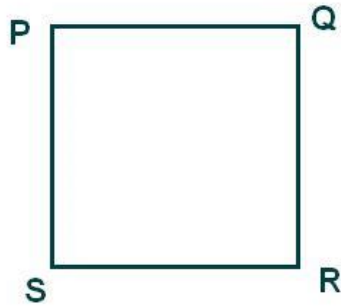
Geometry
Unit 6
PS

1) [3]



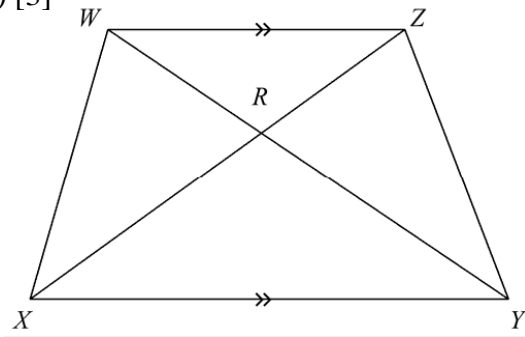
$AD = 2x + 9$
 $DC = 3x - 5$
ABCD is a rhombus
Find the perimeter

2) [5]



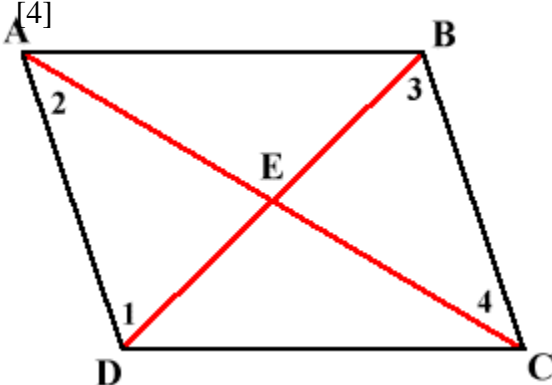
PQRS is a square
 $PR = x + 15$
 $QS = 2x - 2$
Find the Area of the Square

3) [3]



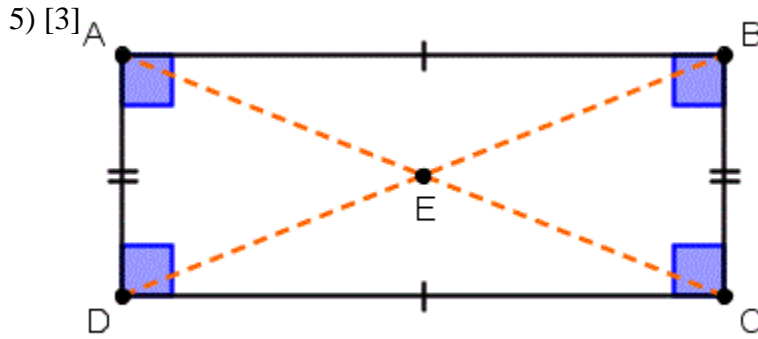
$m\angle WZR = 4x + 2$
 $m\angle RZY = 20x - 11$
 $m\angle RXY = 5x - 4$
Find $m\angle ZYX$

4) [4]

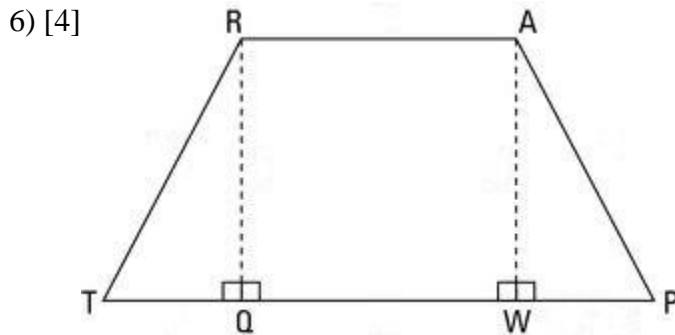


ABCD is a parallelogram

$BD = 2x + 9$
 $AC = 4x + 6$
 $BE = 2x - 1$
Find AE



ABCD is a rectangle
 $m\angle BAC = 2x + 5$
 $m\angle DAC = 3x$
 Find $m\angle BCA$

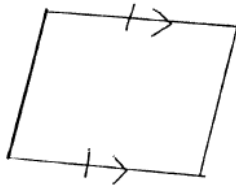


RAPT is an isosceles trapezoid
 $AR = 20$
 $WP = 5$
 $m\angle P = 42^\circ$
 Find the perimeter of RAPT

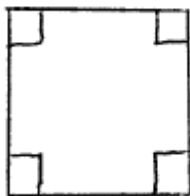
6) [2] What type of quadrilateral has the diagonals bisecting each other, and the diagonals are perpendicular?

7) [2] What is a 4 sided polygon with one set of parallel sides and the other set is congruent but not parallel.

8) [2] What is the most specific name you can give the following quadrilateral?



9) [2] What is the most specific name you can give the following quadrilateral (the diagonals are also perpendicular)?

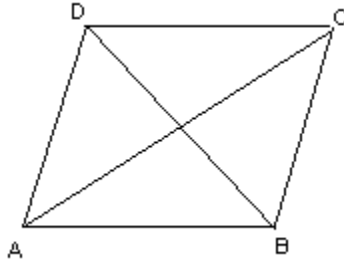


10) [3] How many sides would a regular polygon have that has an interior angle of 150°

11) [2] How big would the exterior angle of a regular decagon be?

12) [5] If two consecutive sides of a rectangle are represented by $x + 1$ and $2x - 2$ while one of the diagonals of this rectangle is represented by $3x - 5$, find the area of this rectangle.

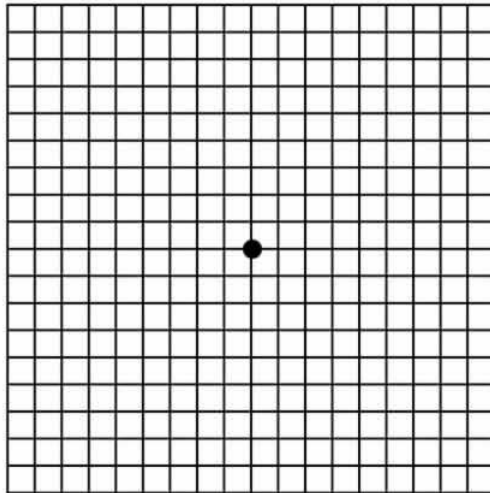
13) [5]



ABCD is a rhombus
 Diagonals intersect at point P
 $BC = 12$, $m\angle ACB = 2x + 4$ and
 $m\angle ACD = 4x - 24$, find AP.

14) [4] If the perimeter of a quadrilateral TYUI is 44 feet and the sides are represented by $TY = x - 9$, $YU = 2x - 26$, $UI = 3x - 47$, and $IT = x - 7$, what is the most specific name you can give this quadrilateral?

15) [4] What type of quadrilateral is formed by $(2, 6)$, $(5, 5)$, $(2, -4)$, and $(-1, -3)$?



16) [3] If each exterior angle of a regular polygon is 15° and two consecutive sides are represented by $x + 5$ and $3x - 13$, find the perimeter of this regular polygon.

17) [3] List all the numbers of degrees of rotational symmetry that a regular dodecagon has between 0 and 360.

18) [3] If an isosceles triangle with a vertex angle of 12° is rotated 12° over and over again until it returns to its original location, what type of polygon is created?

19) [4] If parallelogram $RTYU$ with the following side measurements ($RT = 4x + 1$, $TY = 6x - 5$, and $YU = 5x - 3$) is dilated with a scale factor of $\frac{1}{4}$, what would the perimeter of the $R'T'Y'U'$ be?