Name_____

Properties of Trapezoids

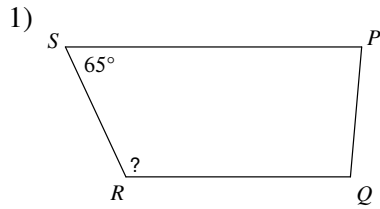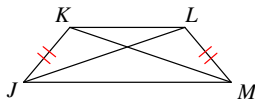Date_____ Period____

Find the length of the angle indicated for each trapezoid.
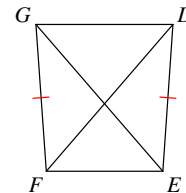
1)

2)

3)

4)
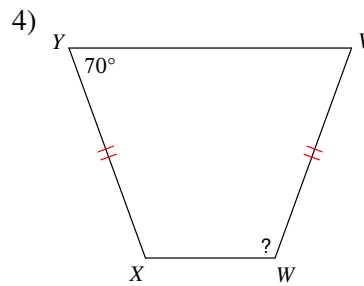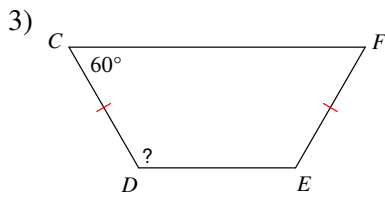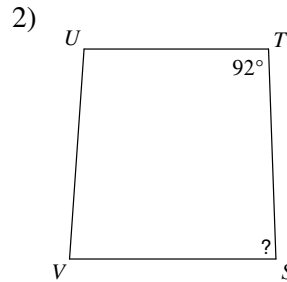
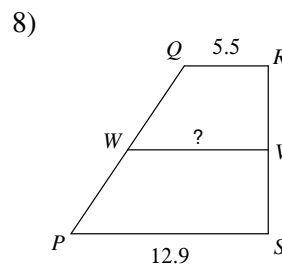**Find the length of the diagonal indicated for each trapezoid.**
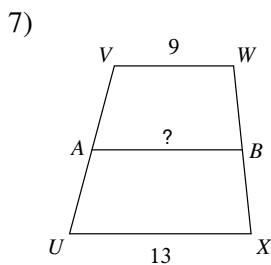
5) $KM = 22$
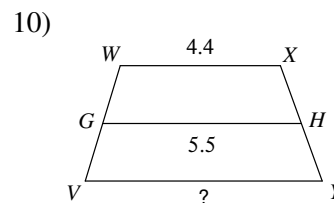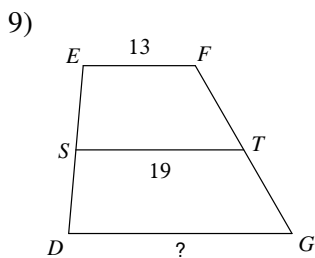   Find JL

6) $DF = 8.7$
   Find EG

Find the length of the median of each trapezoid.
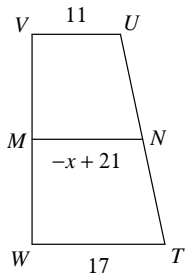
7)

8)

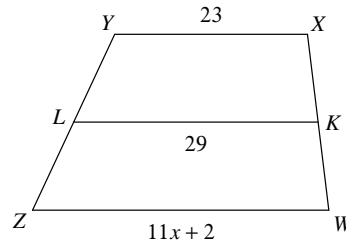
Find the lengh of the base indicated for each trapezoid.

9)

10)

Solve for x. Each figure is a trapezoid.

11)

V — 11 — U
M — $-x+21$ — N
W — 17 — T

12)

Y — 23 — X
L — 29 — K
Z — $11x+2$ — W

13) $EC = 20$
$FD = 5x - 10$

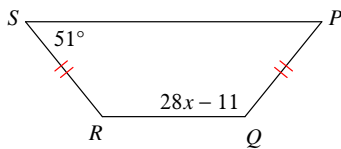E, D, F, C

14)

A, D
$11x+8$
$95°$
B, C

15)

S — P
$51°$
$28x - 11$
R — Q
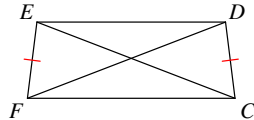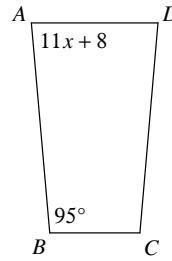
Find the length of the angle indicated for each trapezoid.

16) Find $m\angle V$

U — T
$12x - 28$
$5x + 38$
V — S

17) Find $m\angle R$

Q — T
$6x - 22$
$8x + 34$
R — S
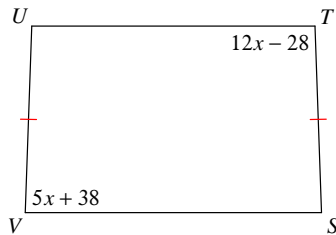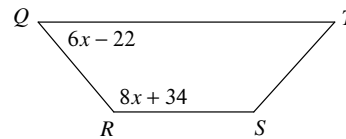
Find the lengh of the base indicated for each trapezoid.

18) Find VU

T — 38 — W
$7x - 4$
F — G
U — $6x - 6$ — V
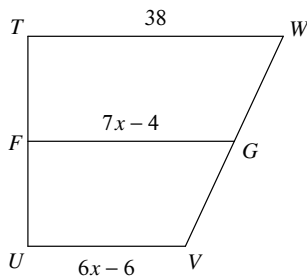
Properties of Kites
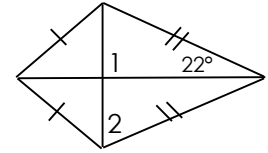
Find the measures of ∠**1** and ∠**2.**

1. $m\angle 1=$ _____

3. $m\angle 2=$ _____

2. $m\angle 1=$ _____
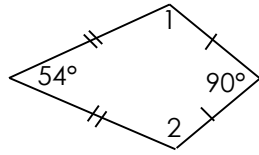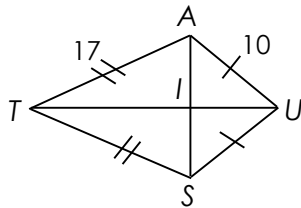
4. $m\angle 2=$ _____

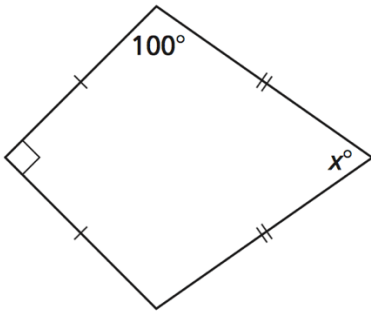### Find UI, IT, and UT, if AS = 16.
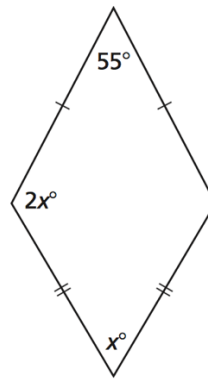
5. UI=_____

6. IT = _____
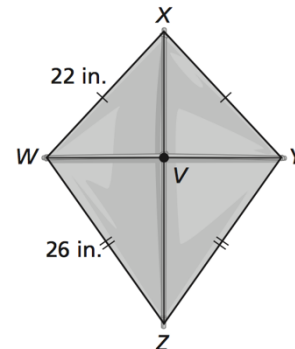
7. UT= _____

Find x.

8.

9.

10. The figure shows a window in the shape of a kite.
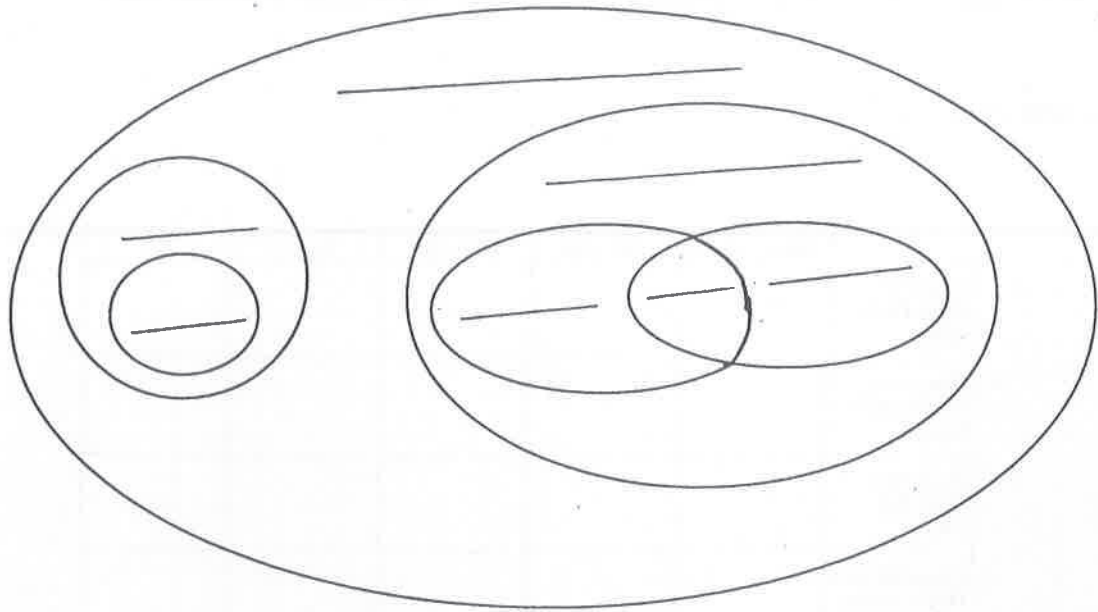
    a. Find $m\angle XVW$.

    b. Find $\overline{XY}$.

    c. Which angle is congruent to $\angle XYZ$?

Properties of Quadrilaterals

Place the names of the quadrilaterals in the correct order in the Venn diagram above.

isosceles trapezoid   parallelogram   trapezoid   rectangle
    square   quadrilateral   rhombus

Use the diagram above to answer the following True/False statements.

_____1. All trapezoids are parallelograms.

_____2. No rectangle is a rhombus.

_____3. All squares are rectangles.

_____4. All parallelograms are quadrilaterals.

_____5. Some isosceles trapezoids are parallelograms.

_____6. All rhombuses are squares.

_____7. All squares are rhombuses.

_____8. No trapezoid is a rectangle.

_____9. Some rectangles re parallelograms.

_____10. All rhombuses are parallelograms.