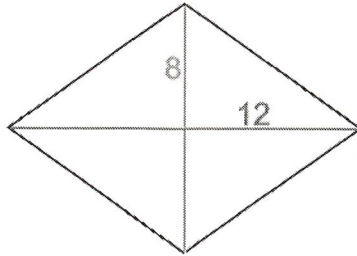


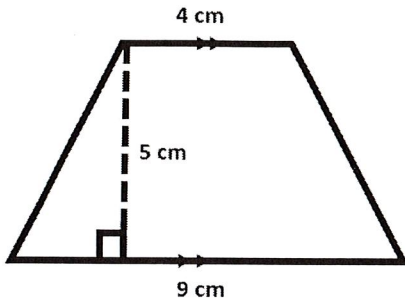
Key

1. Find the area



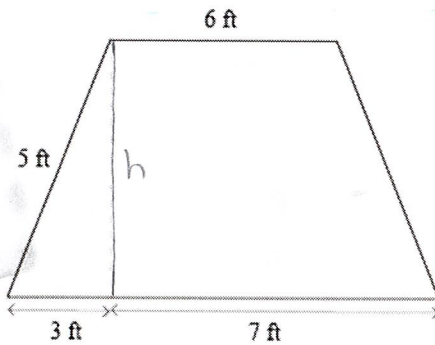
$$A = \frac{d \cdot d}{2} = \frac{16 \cdot 24}{2} = 192$$

2. Find the area



$$A = \frac{(b+B)h}{2} = \frac{(4+9)5}{2} = 32.5$$

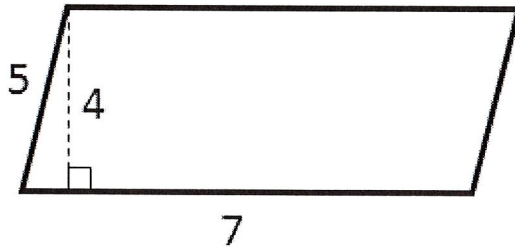
3. Find the area



$$h = \sqrt{5^2 - 3^2} \\ = 4$$

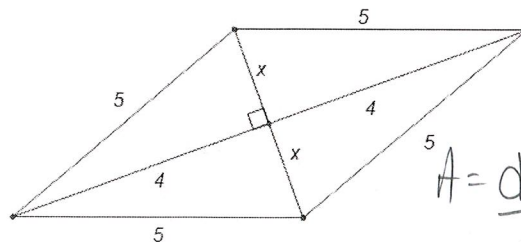
$$A = \frac{(6+10)4}{2} = 32$$

4. Find the area



$$A = b \cdot h \\ = 7 \cdot 4 = 28$$

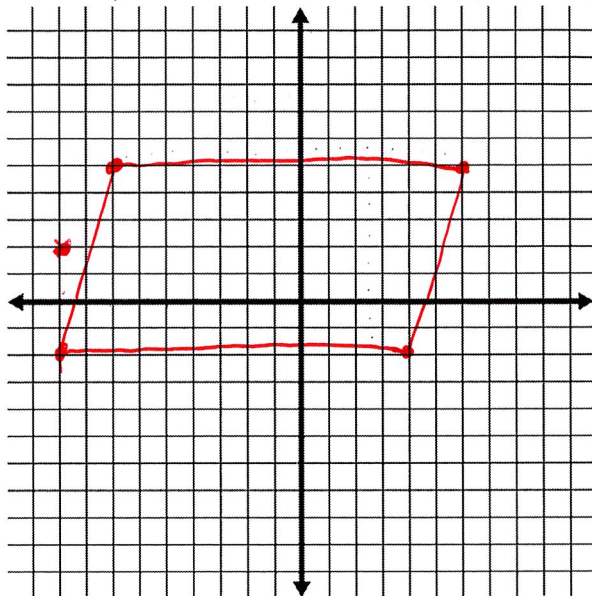
5. Find the area



$$x = \sqrt{5^2 - 4^2} = 3$$

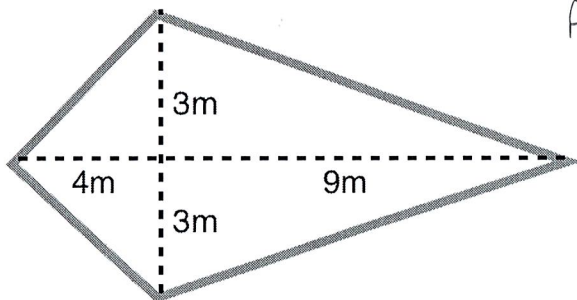
$$A = \frac{d \cdot d}{2} = \frac{8 \cdot 6}{2} = 24$$

6. Plot the points and find the area $(-7,5)$ $(6,5)$ $(-9,2)$ $(4,-2)$



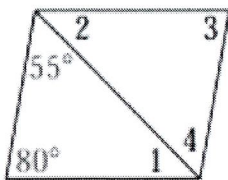
$$A = b \cdot h = 13 \cdot 7 = 91$$

7. Find the area



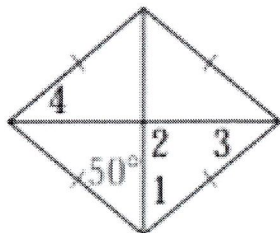
$$A = \frac{d \cdot d}{2} = \frac{6 \cdot 13}{2} = 39$$

8. Find angle 1, 2, 3, 4



$$\begin{aligned} 1 &= 180 - 55 - 80 = 45 \\ 2 &= 45 \text{ (Alt. Int.)} \\ 3 &= 80 \text{ (opp. \(\sphericalangle\))} \\ 4 &= 55 \text{ (Alt. Int.)} \end{aligned}$$

9. Find angles 1, 2, 3, 4



Shape = Rhombus

$$\begin{aligned} \sphericalangle 1 &= 50 \text{ (Angle is bisected)} \\ \sphericalangle 2 &= 90 \text{ (Diagonals } \perp) \\ \sphericalangle 3 &= 180 - 90 - 50 = 40 \\ \sphericalangle 4 &= 40 \text{ (Alt. Int.)} \end{aligned}$$

10. Find angles 1 and 2

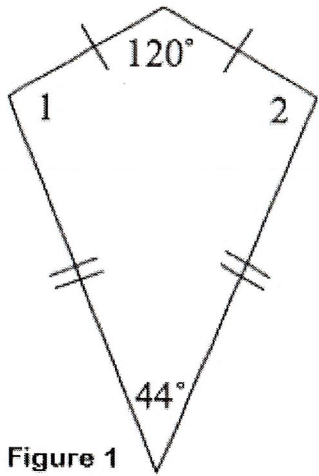
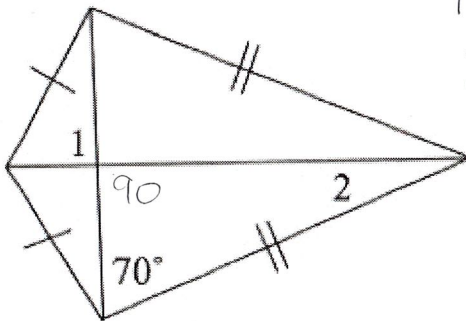


Figure 1

*1 and *2 are congruent

$$\begin{array}{r} 360 \\ - 120 \\ - 44 \\ \hline 196 \\ / \quad \backslash \\ 98 \quad 98 \end{array}$$

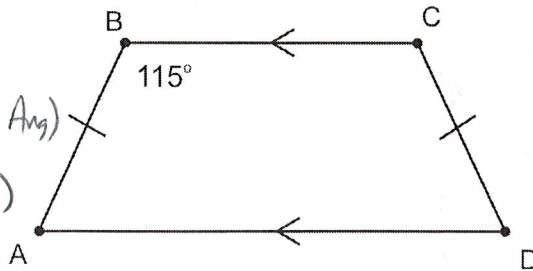
11. Find angles 1 and 2



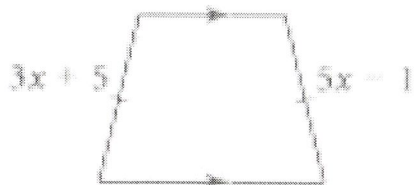
$1 = 90$ (Perp. Diag.)
 $2 = 180 - 90 - 70 = 20$

12. Find angle A and D

$A = 65$ (Cons Ang)
 $D = 65$ (Base Ang)



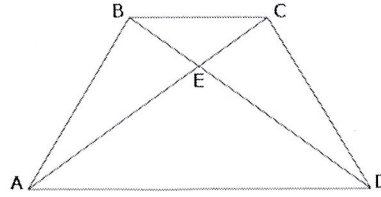
13. Find X



$$\begin{array}{r} 3x + 5 = 5x - 1 \\ - 3x \quad - 3x \\ \hline 5 = 2x - 1 \\ + 1 \quad + 1 \\ \hline 6 = 2x \\ 3 = x \end{array}$$

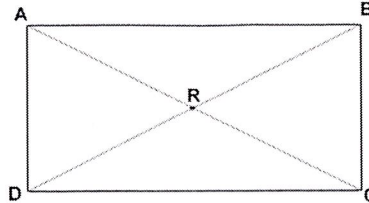
14. If $BD = 2x + 26$ and $AC = 3x - 3$. Find X

$$\begin{array}{r}
 2x + 26 = 3x - 3 \\
 -2x \quad -2x \\
 \hline
 26 = x - 3 \\
 \quad \quad +3 \quad +3 \\
 \hline
 x = 29
 \end{array}$$

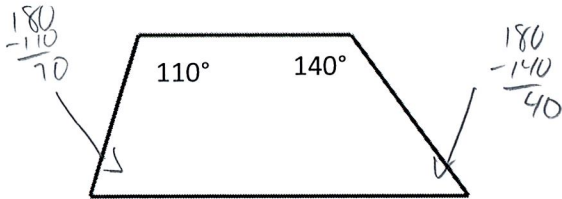


15. If $AC = 10x - 10$ and $BD = 5x + 20$, find X.

$$\begin{array}{r}
 10x - 10 = 5x + 20 \\
 -5x \quad -5x \\
 \hline
 5x - 10 = 20 \\
 \quad \quad +10 \quad +10 \\
 \hline
 5x = 30 \quad x = 6
 \end{array}$$



16. Find the remaining missing angles of the trapezoid.



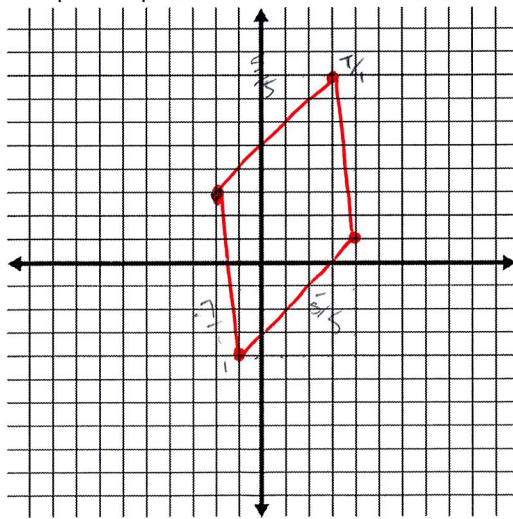
17. Which diagonals have perpendicular diagonals?

Kite, Rhom, SQ.

18. Which diagonals have congruent diagonals?

Rect, SQUARE, ISOS Trap

19. Graph the points and list the best name of the quadrilateral. $(-2,3)$ $(3,8)$ $(4,1)$ $(-1,-4)$



Parallelogram