

Name _____ Block _____

D, E, F are midpoints.

1) $AC = 12, EF =$ _____

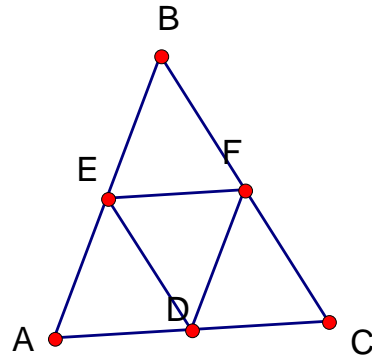
2) $DF = 7, AB =$ _____

3) $DC = 4x, EF = 2x + 14, x =$ _____

4) $BF = 3x - 17, CF = 5x + 4, x =$ _____

5) The area of $\triangle DFC = 6$, what is the area of $\square DEFC$? _____

6) The area of $\triangle DEF = 7$, what is the area of $\triangle ABC$? _____

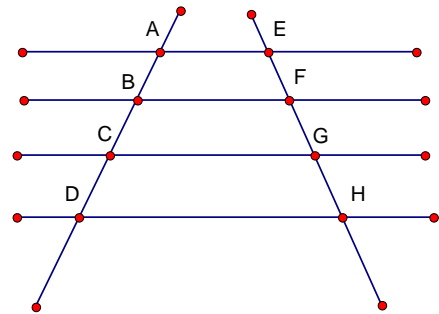


$AC = BC = CD$

7) $AC = 18, BC =$ _____

8) $EF = 12, EH =$ _____

9) $BC = 2x - 4, CD = 22, x =$ _____



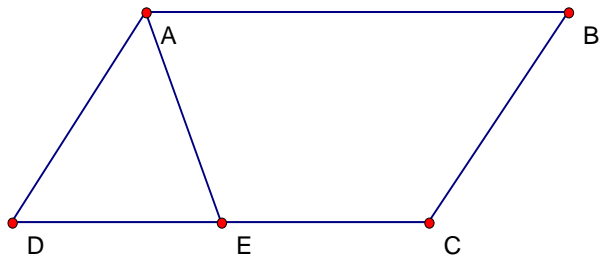
10) $AB = x - 2y, BC = 2, EF = 6, FG = -3x + 2y$, find x _____

find y _____

11)

Given: $\square ABCD$
 $\overline{AE} \cong \overline{BC}$

Prove: $\triangle ADE$ is isosceles



Statements:

Reasons:

$\square PQRS$ Diagonals Intersect at T
True or False

12) $\overline{PS} \cong \overline{TS}$ _____

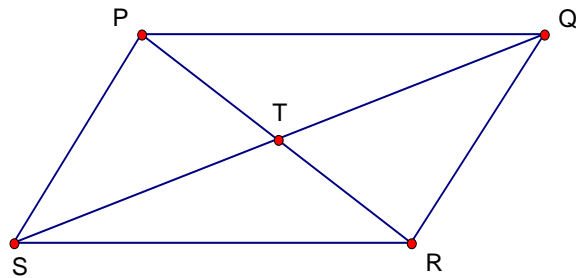
13) $\overline{PT} \cong \overline{RT}$ _____

14) $\angle PSQ \cong \angle RQS$ _____

15) $\overline{SQ} \cong \overline{PR}$ _____

16) $\overline{RT} \cong \overline{QT}$ _____

17) Prove: $\triangle PTS \cong \triangle RTQ$



Statements:

Reasons:

For $\square JFKH$, fill in the blank

18) opposite angles are _____

19) \overline{JF} _____ \overline{HK}

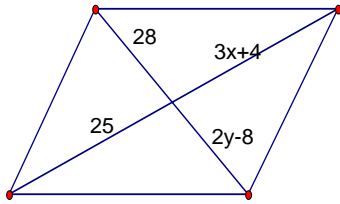
20) consecutive angles are _____

21) \overline{JK} _____ \overline{HF}

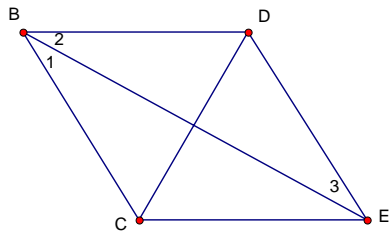
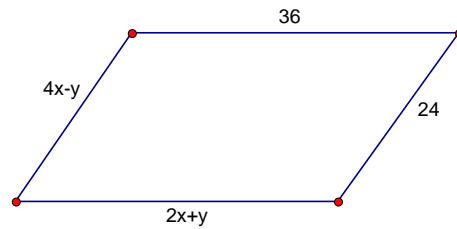
22) $\angle H$ and $\angle K$ are _____

23) \overline{JH} and \overline{FK} are _____

24) Find x and y



25) Find x and y



26) $m\angle 1 = 42$
 $m\angle 2 = x^2$
 $m\angle CED = 13x$
 find x

27) $m\angle 1 = 3x$
 $m\angle 3 = x^2 - 70$
 find x

