

Name: _____

Triangle Warm-up

① Which of the following lengths could create a triangle?

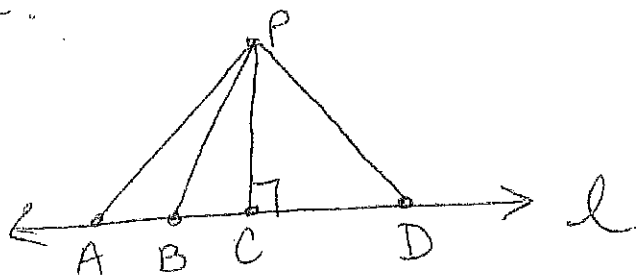
a. 3, 8, 11

c. 3, 5, 4

b. 7, 9, 30

d. 7, 7, 14

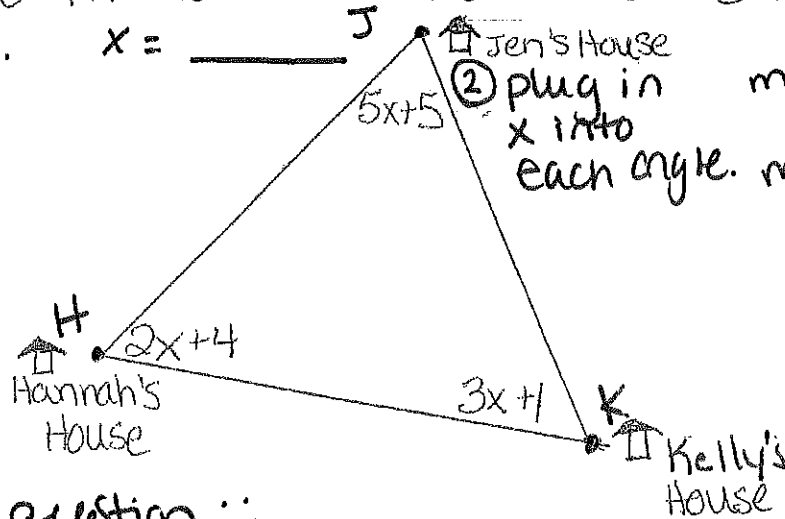
② Name the shortest distance from point P to line l .



③ Jen, Hannah, and Kelly's all live by each other in a triangular formation. Which two live closest together? Which two live farthest from each other?

A) Find x .
(A sum)

$x =$ _____



② plug in x into each angle.

$m\angle J =$ _____
 $m\angle H =$ _____
 $m\angle K =$ _____

③ Answer question :

complete your warm up

Name: Key

Triangle Warm-up

① Which of the following lengths could create a triangle?

~~A~~ 3, 8, 11 $3+8=11$

C 3, 5, 4 $3+4=7$
Yes!

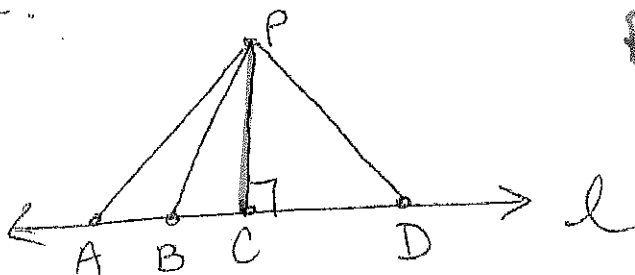
~~B~~ 7, 9, 30

~~D~~ 7, 7, 14

$7+9=16$

$7+7=14$

② Name the shortest distance from point P to line l.



PC

③ Jen, Hannah, and Kelly's all live by each other in a triangular formation. Which two live closest together? Which two live farthest from each other?

A) Find x. $x = \underline{17}$
(A sum)

$5x+5 + 2x+4 + 3x+1 = 180$

$10x + 10 = 180$

$\frac{10x}{10} = \frac{170}{10}$

$x = 17$

H

Hannah's House

J Jen's House

② plug in x into each angle.

$m\angle J = \underline{90^\circ}$

$m\angle H = \underline{38^\circ}$

$m\angle K = \underline{52^\circ}$

$2(17)+4$
 38°

$5(17)+5$
 90°

$3(17)+1$
 52°

K Kelly's House

The closest: Jen + Kelly JK
The farthest: Hannah + Kelly HK

③ Answer question :