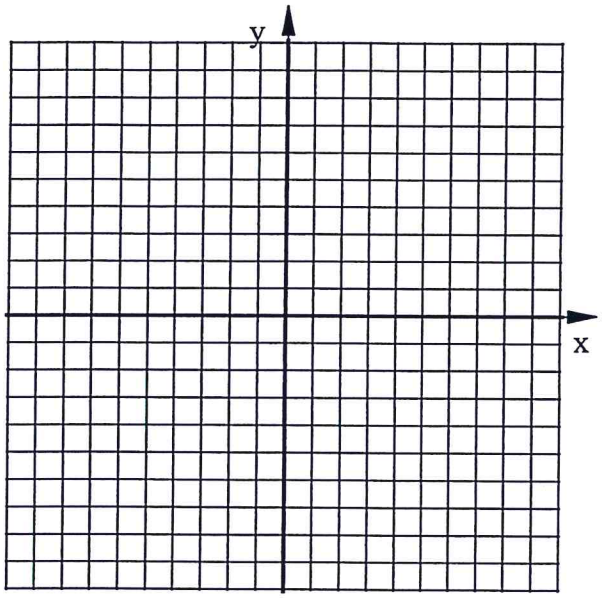
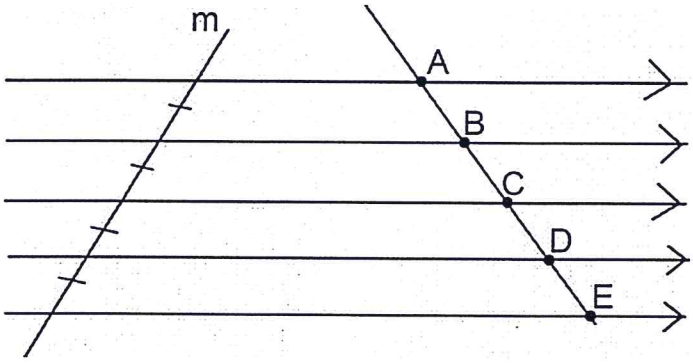
Bellwork Geometry Tuesday, January 28, 2020

1. Use these coordinates of A, B, and & C: $A(1,-2)$ $B(3,2)$ $C(5,-1)$
Find three different coordinates of pt D such that ABCD is a parallelogram.

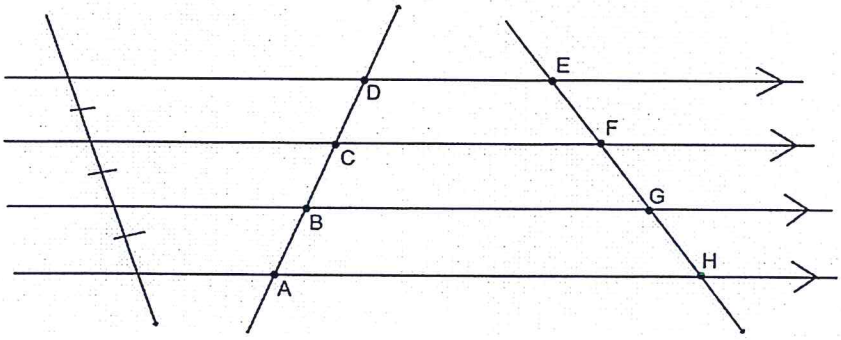


2. Given: These parallel lines cut transversal m into congruent segments.



If $BE = 12$ find the following: a) AC b) AE

3. Use the figure below showing 4 parallel lines:



Given: $AD = 4x + 18$, $EG = 6x + 3$, and $BC = 2x + 3$. Find GH.

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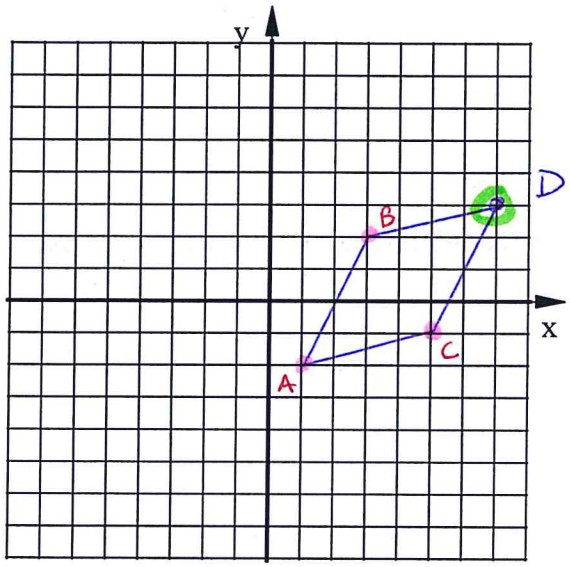
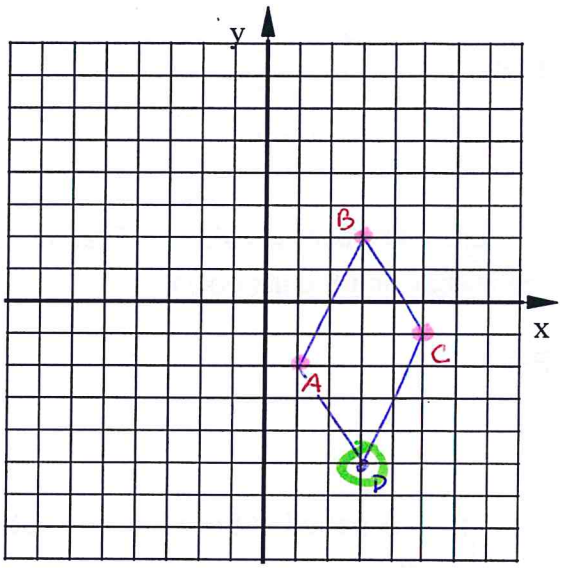
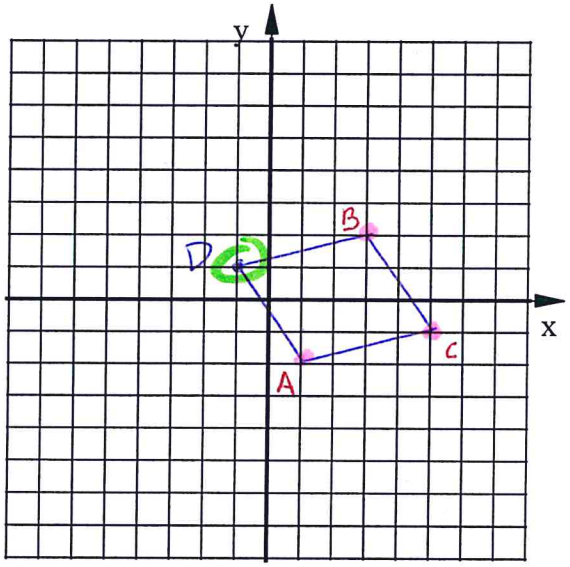
ANSWERS







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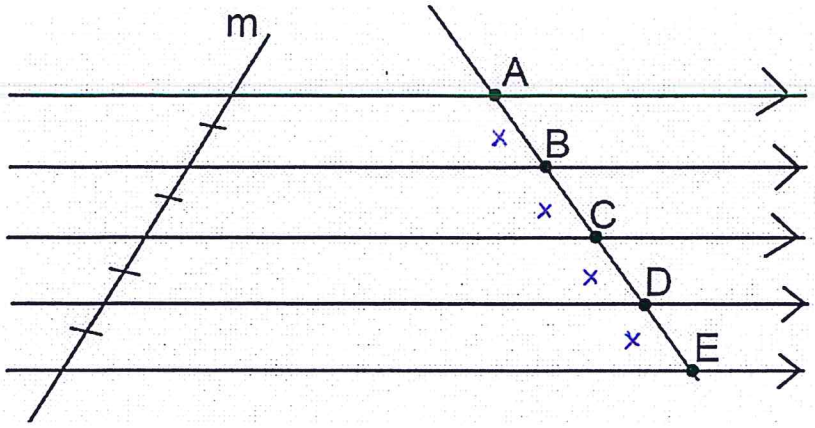


$AB = BC = CD = DE$

Label each x

If $BE = 12$ find the following: a) AC b) AE

$BE = 3x$

$12 = 3x$

$x = 4$

$AC = 2x$

$AC = 2(4)$

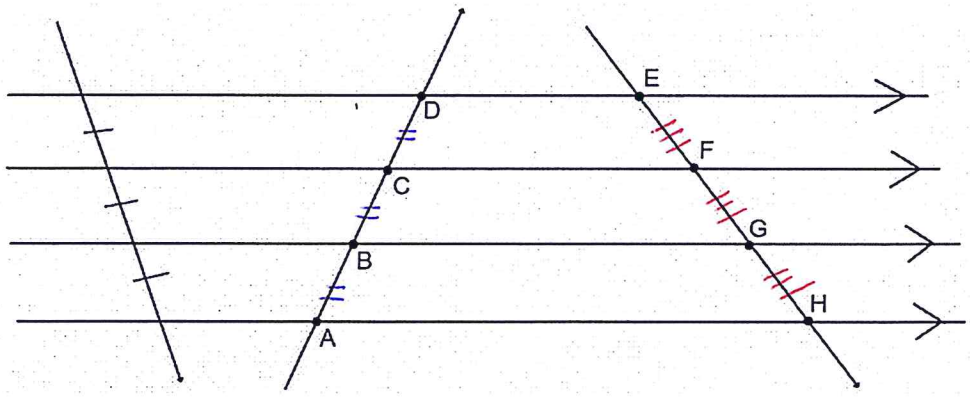
$AC = 8$

$AE = 4x$

$AE = 4(4)$

$AE = 16$

3. Use the figure below showing 4 parallel lines:



Given: $AD = 4x + 18$, $EG = 6x + 3$, and $BC = 2x + 3$. Find GH.

$AB = BC = CD$

$AD = BC \cdot 3$

$4x + 18 = (2x + 3)3$

$4x + 18 = 6x + 9$

$-4x \quad -4x$

$18 = 2x + 9$

$-9 \quad -9$

$\frac{9}{2} = \frac{2x}{2}$

$x = 4.5$

$EF = FG = GH$

$\frac{EG}{2} = \frac{GH \cdot 2}{2}$

$GH = \frac{EG}{2}$

$= \frac{(6x+3)}{2}$

$= \frac{6(4.5) + 3}{2}$

$= 30/2$

$GH = 15$