Directions ☀ *There will be a 2 question quiz on these questions on the last day of class in each week.*
Dates are posted above!!!   PRACTICE THESE and CHECK YOUR ANSWERS!
You w☀*have exactly 10 minutes to complete the quiz.*
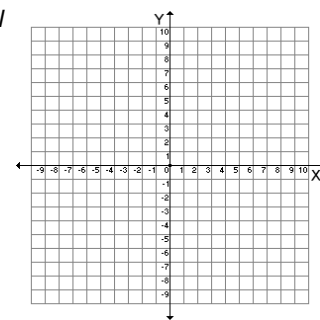
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1) As shown in the diagram below, lines m and n are cut by transversal p.
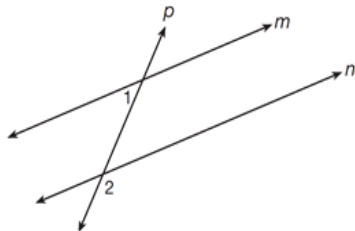
If $m\angle 1 = 4x + 14$ and $m\angle 2 = 8x + 10$,

for what value of x would make *lines m* and *n* parallel?

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2) Point M is the midpoint of $\overline{AB}$. If the coordinates of M are $(2,8)$ and the coordinates of A are $(10,12)$, what are the coordinates of B?
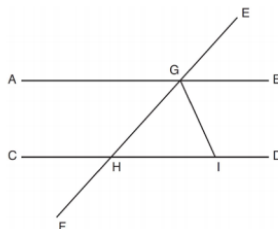
Use of graph is optional

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3) If the endpoints of $\overline{AB}$ are $A(-4,5)$ and $B(2,-5)$, what is the length of $\overline{AB}$?

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4) Peach Street and Cherry Street are parallel. Apple Street intersects them, as shown in the diagram below.

Apple Street
Peach Street
1
Cherry Street   2
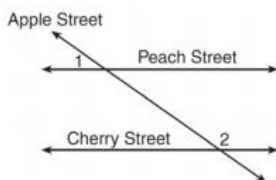
If $m\angle 1 = 2x + 36$ and $m\angle 2 = 7x - 9$, what is $m\angle 1$?

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5) In the diagram below, $\overline{EF}$ intersects $\overline{AB}$ and $\overline{CD}$ at G and H, respectively, and $\overline{GI}$ is drawn such that $\overline{GH} \cong \overline{IH}$.

If $m\angle EGB = 50°$ and $m\angle DIG = 115°$, explain why $\overline{AB} \parallel \overline{CD}$.

Answers: 1) x =13   **2)** (-6, 4)   **3)** $2\sqrt{34}$ **4)** measure of angle 1 = 70⁰

5) Since linear angles are supplementary, $m\angle GIH = 65°$. Since $\overline{GH} \cong \overline{IH}$, $m\angle GHI = 50°$ $(180 - (65 + 65))$. Since $\angle EGB \cong \angle GHI$, the corresponding angles formed by the transversal and lines are congruent and $\overline{AB} \parallel \overline{CD}$.