



Name _____ Period _____ Date _____

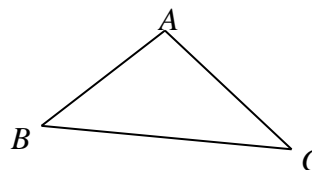
Using Algebra to Find Angle Measures

(note that figures are not drawn to scale)

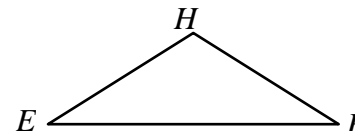
- 1. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____
- 7. _____
- 8. _____

1. In $\triangle ABC$, $m\angle A = 3x$, $\angle B = 2x+10$, and $m\angle C = 20$.

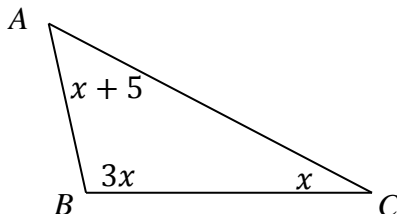
What is the measure of $\angle A$?



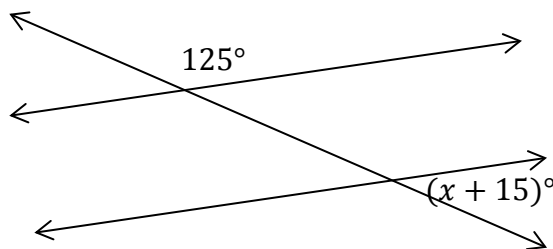
2. If the $m\angle EFH = 39^\circ$ and the $m\angle EHF = 5x + 2$, find the value of x so $m\angle EFH = m\angle HEF$.



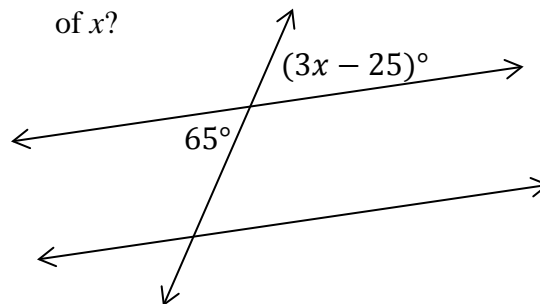
3. In the figure below, what is the measure of $\angle B$?



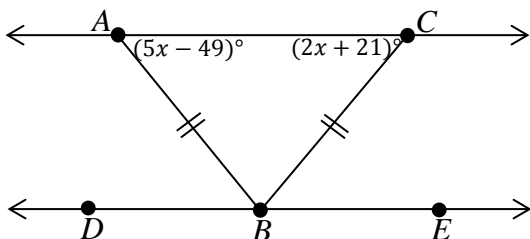
4. In the figure below, what is the value of x ?



5. In the figure below, what is the value of x ?



Use the following figure for questions 6 – 8. Note for pre-algebra students: angles opposite equal sides are equal.



6. Solve for x to find the $m\angle CAB$ and $m\angle ACB$.

7. What is the $m\angle ABC$?

8. If $m\angle ABD = 47^\circ$, what is the $m\angle CBE$?