Using Algebra to Find Angle Measures #2
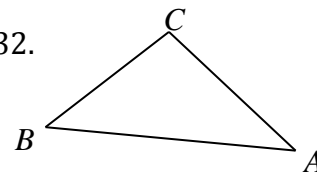**(note that figures are not drawn to scale)**

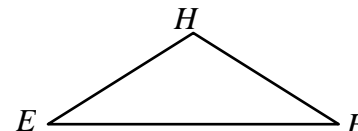1. In $\triangle ABC, m\angle A = 2x - 30, \ m\angle B = x + 10, \ and \ m\angle C = 4x + 32$.
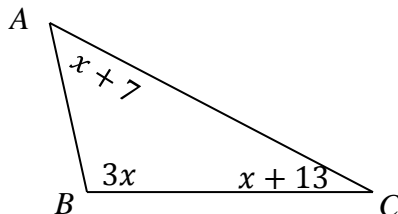What is the measure of $\angle A$?

2. If the $m\angle H = 94°$ and the $m\angle HEF = 2x + 3$, find the
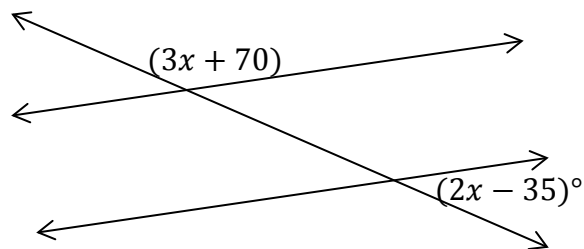value of x so $m\angle EFH = m\angle HEF$.

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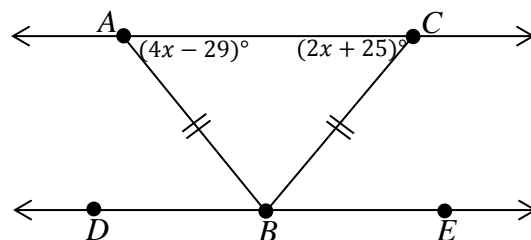
4. In the figure below, what is the value of x?

$(3x + 70)$

$(2x - 35)°$

A

$x + 7$

$3x$ $x + 13$

B C

5. Find the $m\angle CAB$?

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

7. If $m\angle ABD = 78°$, what is the $m\angle CBE$?

A C

$(4x - 29)°$ $(2x + 25)°$

D B E
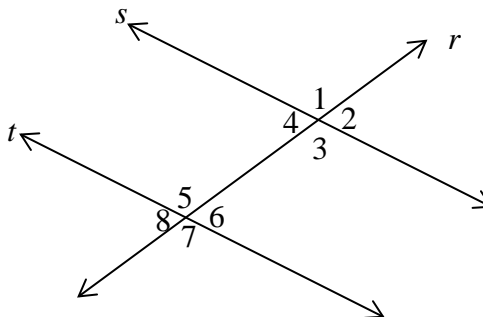
Given the figure with $s \parallel t$, $m\angle 2 = 7x$ and $m\angle 5 = 11x$. Find the measure of each numbered angle.

8. $m\angle 1 = ?$ 9. $m\angle 4 = ?$

10. $m\angle 5 = ?$ 11. $m\angle 7 = ?$

12. $m\angle 8 = ?$

s r

1 2
4 3

t

5 6
8 7

1._____

2._____

3._____

4._____

5._____

6._____

7._____

8._____

9._____

10._____

11._____

12._____