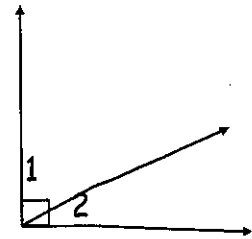


Use the Four-Step Problem-Solving Procedure for each problem. Write your final answers in the appropriate blank.

Complementary Angles

1. $m\angle 1 = 4x - 3$ and $m\angle 2 = x + 8$. Find x and $m\angle 2$.

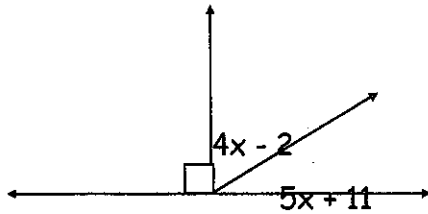
$x =$ _____
 $m\angle 2 =$ _____



2. $\angle 5$ is the complement of $\angle 6$. If $m\angle 5 = 8x - 6$ and $m\angle 6 = 14x + 8$, find x and $m\angle 6$.

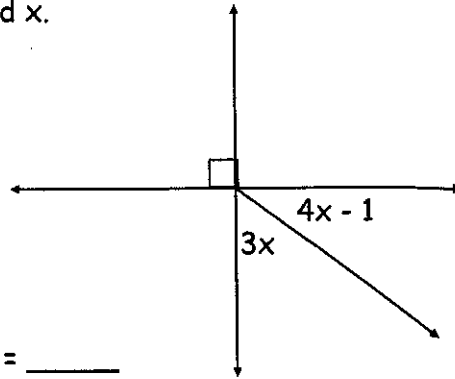
$x =$ _____
 $m\angle 6 =$ _____

3. Find x .



$x =$ _____

4. Find x .

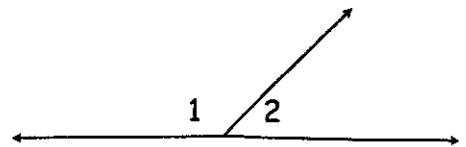


$x =$ _____

Supplementary Angles/Linear Pair

5. $m\angle 1 = 2x + 4$ and $m\angle 2 = 6x + 20$. Find x and $m\angle 1$.

$x =$ _____
 $m\angle 1 =$ _____

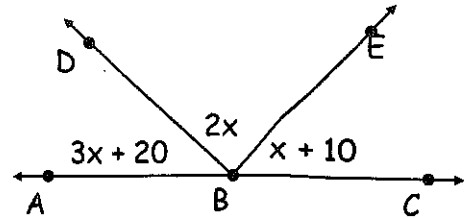


6. $\angle 3$ and $\angle 4$ are a linear pair. $m\angle 3 = 12x - 15$ and $m\angle 4 = 3x + 45$. Find x and $m\angle 4$.

$x =$ _____
 $m\angle 4 =$ _____

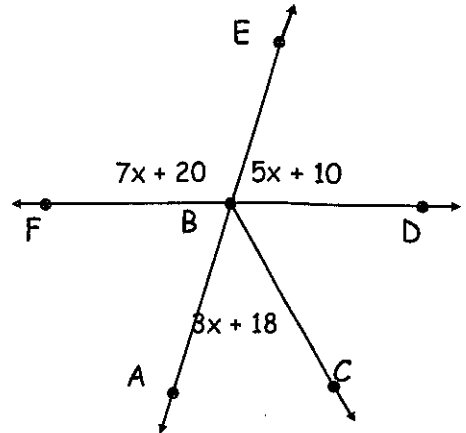
7. In the picture to the right, find x and $m\angle ABE$.

$x =$ _____
 $m\angle ABE =$ _____



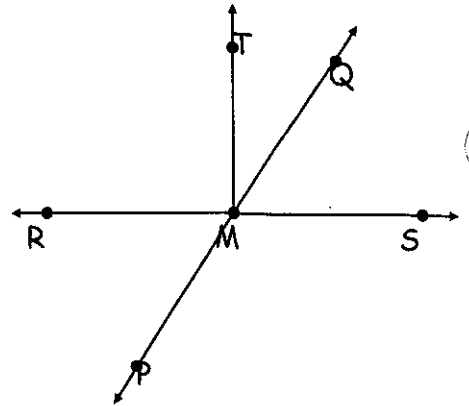
8. In the picture to the right, find x and $m\angle ABC$.

$x =$ _____
 $m\angle ABC =$ _____



9. $\overline{TM} \perp \overline{RS}$, $m\angle QMS = 58^\circ$. Find the measure of each angle.

- a) $m\angle TMQ =$ _____ b) $m\angle RMP =$ _____
 c) $m\angle SMP =$ _____ d) $m\angle PMT =$ _____



10. $m\angle AEC = 3x + 5$ and $m\angle DEF = 2x - 15$. Find $m\angle DEF$, $m\angle DEB$, and $m\angle CEB$.

$m\angle DEF =$ _____
 $m\angle DEB =$ _____
 $m\angle CEB =$ _____

