1. Which lines are // based on the given information. Explain your answers.
a. $m \angle 1=m \angle 14$
b. $\angle 6 \& \angle 7$ are supplementary
c. $m \angle 7=m \angle 13$

2. What term matches the definition and sketch?
a. Two lines that do not intersect and are coplanar.

b. Two non-adjacent interior angles on the same side of a transversal.

3. Graph $4 \mathrm{x}-3 \mathrm{y} \geq 12$

4. Factor completely: $10 x^{2}-40$
5. Use the M-I-U system on page $\mathbf{3 . 1 0}$ to prove the following:
Given: MI
Prove: MUIUI

Geometry Week 9 Tuesday Warm-up
Given $a / / b$ and $a \perp c$.
Find the measure of all the numbered angles.


What term matches the definition and sketch?
8. Two lines that do not intersect and are not coplanar.

9. Two non-adjacent angles on the same side of a transversal, one interior and one exterior.



What term matches the definition and sketch?
10. Two lines that meet to form right angles.

11. Two non-adjacent exterior angles on the opposite side of a transversal.


1. Given: $a\|b, c\| d$

Prove: $m \angle 2=m \angle 15$


| Statements | Reasons |
| :---: | :---: |
|  |  |
| 2. $m \angle 2=m \angle 4$ |  |
| 3. $m \angle 4=m \angle 15$ |  |
| 4. $m \angle 2=m \angle 15$ |  |

Make a deduction and name the property used:
2. If $\angle 1+\angle 2=180^{\circ}$ and $\angle 1=\angle 3$, then $\qquad$ .
3. If $\mathbf{m} \angle 1-20^{\circ}=\mathbf{9 0}$, then $\qquad$ .
4. Which lines are /l (if any) based on the given information. Explain your answers.
a. $\angle 5 \& \angle 8$ are supplementary
b. $m \angle 1=m \angle 13$
c. $m \angle 5=m \angle 10$


