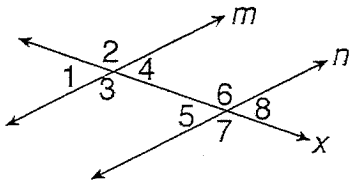
Name _____ Class _____ Date _____

5-2

Additional Practice

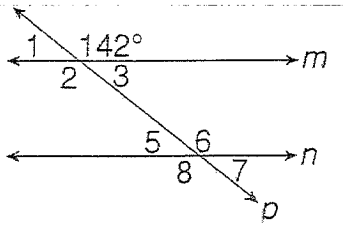
1. Measure the angles formed by the transversal and the parallel lines. Which angles seem to be congruent?



_____

_____

In the figure, line *m* || line *n*. Find the measure of each angle. Justify your answer.



2. ∠1 _____

3. ∠2 _____

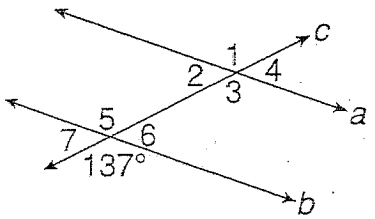
4. ∠5 _____

5. ∠6 _____

6. ∠8 _____

7. ∠7 _____

In the figure, line *a* || line *b*. Find the measure of each angle. Justify your answer.



8. ∠2 _____

9. ∠5 _____

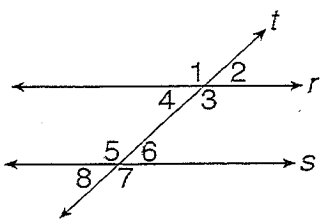
10. ∠6 _____

11. ∠7 _____

12. ∠4 _____

13. ∠3 _____

In the figure, line *r* || line *s*.



14. Name all angles congruent to ∠2.

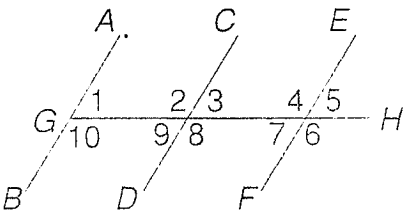
_____

15. Which line is the transversal?

_____

Problem Solving

The figure shows the layout of parking spaces in a parking lot.
$\overline{AB} \parallel \overline{CD} \parallel \overline{EF}$



1. Name all angles congruent to $\angle 1$.

   _____

2. Name all angles congruent to $\angle 2$.

   _____

3. Name a pair of supplementary angles.

   _____

4. If $m\angle 1 = 75°$, find the measures of the other angles.

   _____

   _____

   _____

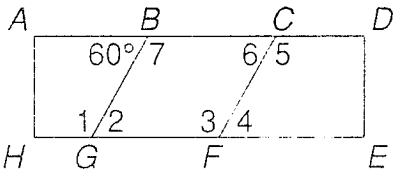
5. Name a pair of vertical angles.

   _____

6. If $m\angle 1 = 90°$, then $\overline{GH}$ is perpendicular to

   _____

The figure shows a board that will be cut along parallel segments *GB* and *CF*. $\overline{AD} \parallel \overline{HE}$. Choose the letter for the best answer.



7. Find the measure of $\angle 1$.
   A 45° C 60°
   B 120° D 90°

8. Find the measure of $\angle 2$.
   F 30° H 60°
   G 120° J 90°

9. Find the measure of $\angle 3$.
   A 30° C 60°
   B 120° D 90°

10. Find the measure of $\angle 4$.
    F 45° H 60°
    G 120° J 90°

11. Find the measure of $\angle 5$.
    A 30° C 60°
    B 120° D 90°

12. Find the measure of $\angle 6$.
    F 30° H 60°
    G 120° J 90°

13. Find the measure of $\angle 7$.
    A 45° C 60°
    B 120° D 90°