**UNIT 6 Project**

1. **Explain** the difference between a ratio and a rate.

**Express each ratio as a fraction in simplest form.**
   2. 13 oranges to 26 apples
   3. 12 inches to 3 feet

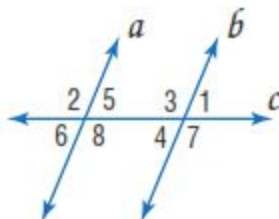**Express each ratio as a unit rate. Round to the nearest tenth or cent.**
   4. 68 miles per 2 gallons of gas
   5. $10.50 for 2 lbs of rice

**Solve each proportion.**

6. $\dfrac{3}{4} = \dfrac{x}{2}$

7. $\dfrac{5}{6} = \dfrac{x}{15}$

**In the figure below, $a \parallel b$, and $c$ is a transversal. $m \angle 5 = 52°$. Find the measure of each angle specified below.**
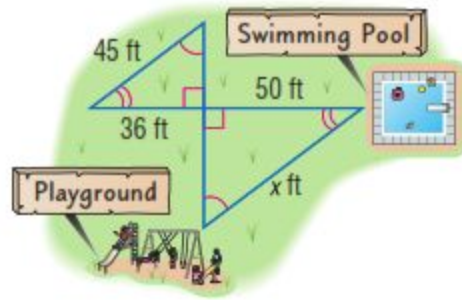


8. $\angle 6$

9. $\angle 7$

**In triangle *MNP*, $m \angle N = 43°$ and $m \angle P = 94°$**

10. Find the $m \angle M$.
11. Classify the triangle by its angles and by its sides.

12.

In the map of the park, the triangles are similar. Find the distance to the nearest tenth from the playground to the swimming pool.
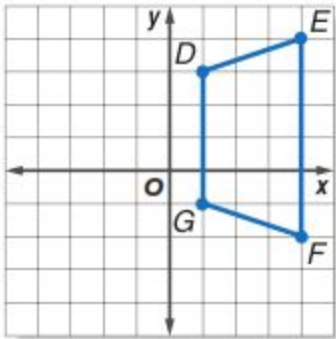


Complete each congruence statement if $\triangle RST \cong \triangle UVY$.

13. $\angle VYU \cong$ _____.

14. $\overline{ST} \cong$ _____.

**Find the coordinates of the vertices of each figure after the given transformation. then graph the transformation image.**

15. rotation 90° clockwise.



16. reflection over the x-axis.