

Florida Geometry
Chapter 3A - Get Ready Solutions

1. $\angle 1$ and $\angle 5$, $\angle 5$ and $\angle 2$

2. $\angle 3$ and $\angle 4$

3. $\angle 1$ and $\angle 2$

4. $\angle 1$ and $\angle 5$, $\angle 5$ and $\angle 2$

7.

$$\begin{aligned}3x + 11 &= 7x - 5 \\3x + 11 + 5 &= 7x - 5 + 5 \\3x + 16 &= 7x \\3x + 16 - 3x &= 7x - 3x \\16 &= 4x \\\frac{16}{4} &= \frac{4x}{4} \\4 &= x\end{aligned}$$

8.

$$\begin{aligned}(x - 4) + 52 &= 109 \\(x - 4) + 52 - 52 &= 109 - 52 \\x - 4 &= 57 \\x - 4 + 4 &= 57 + 4 \\x &= 61\end{aligned}$$

10.

$$\begin{aligned}d &= \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2} \\d &= \sqrt{(5 - 1)^2 + (0 - 3)^2} \\d &= \sqrt{4^2 + (-3)^2} \\d &= \sqrt{16 + 9} \\d &= \sqrt{25} \\d &= 5\end{aligned}$$

11.

$$\begin{aligned}d &= \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2} \\d &= \sqrt{(4 - 2)^2 + (4 - (-4))^2} \\d &= \sqrt{2^2 + 8^2} \\d &= \sqrt{4 + 64} \\d &= \sqrt{68} \\d &= 2\sqrt{17}\end{aligned}$$

13. Answers may vary. Sample:
A figure divides a plane or space into three parts: the figure itself, the region inside the figure, called its interior, and the region outside the figure, called its exterior.

14. Answers may vary. Sample:
Trans- means "across"; a transversal crosses other lines.

15. Answers may vary. Sample:
A flow proof shows the individual steps of the proof and how each step is related to the other steps.