

Name _____ Period: ____ Date: _____ Group: _____

Chapter 8 Quiz: Blood Spatter Analysis of a Crime Scene.

Directions: Complete the steps for the activity listed. Record your results in the diagram and answer the questions below. You may confirm your result with your lab partners only. Note that this crime only involve the two man in the picture.

1. Examine Crime Scene Diagram 1 and complete the lines of convergence.
2. Draw circles around each man’s position at the time of the shooting.
3. Label the position for Man 1 in the diagram by writing Man 1 by the circle drawn (if different from already present label). Evidence that support this answer should be that all convergent line meet at that position.
4. Label the position for Man 2 in the diagram by writing Man 2 by the circle drawn. What evidence supports your answer?

Evidence: _____

5. Both men died. **Man 1 was shot through the forehead** and died instantly. **Man 2 was shot in the stomach** and was found dead at the scene as well. Who was shot first? _____ Support your answer with evidence from the crime scene. Hint: Examine the blood drops.

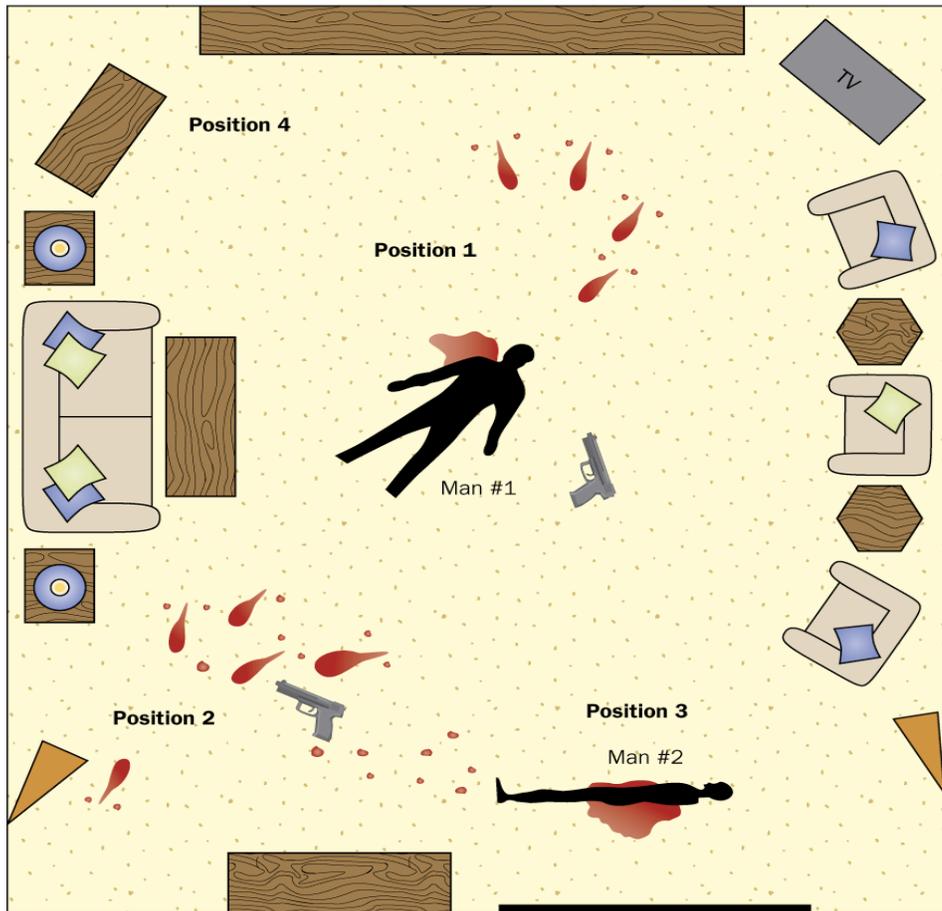
Evidence: _____

6. Data Table 1 contains some of the measurements for the bloodstains found at each position. Complete the table by filling in the blanks using a calculator.

Data Table 1. Blood Stain measurements
(notes stain #1-5 are from Man 2 and stain #6-9 are from Man 1)

Stain #	Length of Stain (L) (mm)	Width of Stain (W) (mm)	W/L ratio (Sine Value)	Angle of Impact (nearest degree)	Distance from Near Edge of Stain (feet)	Tan Value of Angle of Impact (to four decimal places)	Height (h) of wound above floor (feet) $h = \text{Tan} \times \text{distance}$
1	18.1	9.6	0.53	32°	4.0	0.6249	2.49 ft
2	18.6	9.0			4.4		
3	17.8	13.2			2.2		
4	18.9	12.8			2.8		
5	19.2	13.2			2.5		
6	9.0	4.5	0.50	30°	10.1	0.5774	5.8 ft
7	10.6	5.1			10.3		
8	8.4	3.9			10.4		
9	8.1	3.6			10.3		

Crime Scene Diagram 1 (Note: Not drawn to scale)



7. Based on your calculations, which man was most likely standing when he was shot? _____ Support your answer with evidence from the crime scene.

8. In position 1, there are four bloodstains in front and one bloodstain behind the victim. How do you account for this? _____

Based on the blood-spatter evidence, describe the series of events resulting in the death of these two men. Support your theory with evidence obtained from the blood-spatter analysis.

Step 1: _____

Evidence: _____

Step 2: _____

Evidence: _____

Step 3: _____

Evidence: _____