

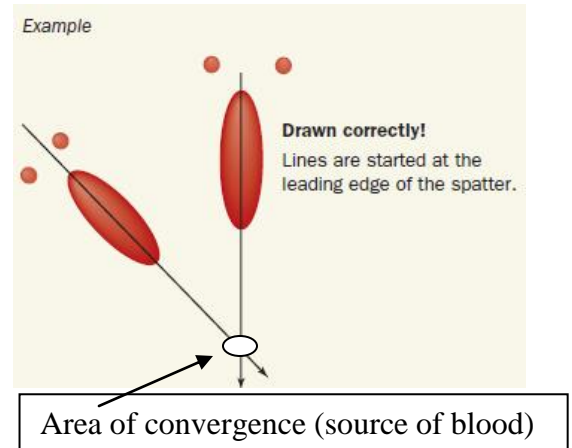
## BLOOD ACTIVITY - AREA OF CONVERGENCE

### Background:

The shape of an individual drop of blood provides clues to the direction from which the blood originated. When a drop of blood is elongated (longer than it is wide), it is possible to determine the direction the blood was traveling when it struck a surface. The location of the source of blood can be determined if there are at least **two** drops of blood spatter. By drawing straight lines down the long axis of the blood spatter and noting where the lines intersect, this will indicate the **lines of convergence**. To determine where the source of the blood originated, draw a small circle around all of the intersecting lines. The intersection of the lines of convergence will indicate in a two-dimensional view the location of the source of the blood.

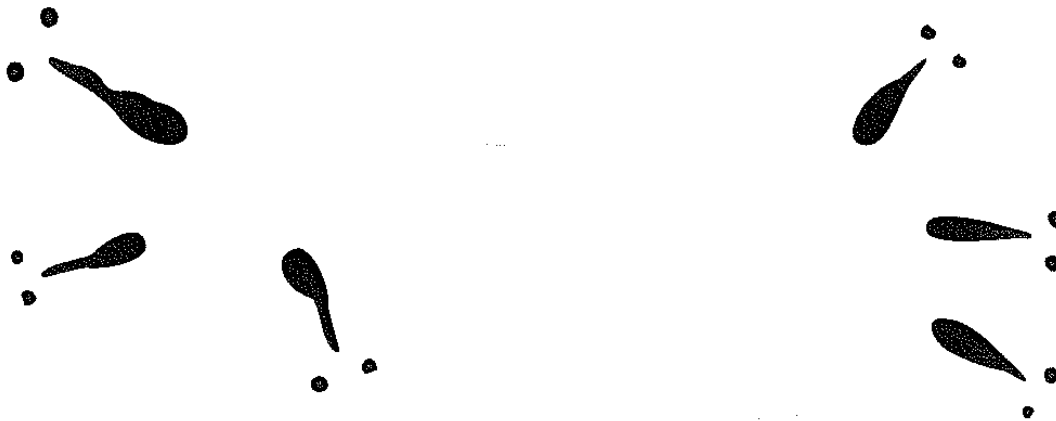
### Procedure:

1. Draw lines of convergence to determine the source of the blood.
2. Determine the direction in which each blood spatter is moving by locating the tail of the blood spatter and any satellites. The satellites will be found ahead of the blood spatter.
3. Draw a line through the middle of the long axis of each of the major drops of blood. Do not draw lines through the satellites.
4. Note: Begin your lines at the leading edge of the drop of blood, and draw the line in the opposite direction from the direction in which the blood was traveling.
5. Draw a small circle around the point where all of the lines intersect using a colored pencil or marker. This is the source of the blood or area of convergence.



### Areas of Convergence

#### Sample A



Describe what could have happened in this scene: (can show and explain on picture)

- a. How many individuals are involved?
- b. In what direction is movement?

Sample B



Describe what could have happened in this scene: (can show and explain on picture)

- How many individuals are involved?
- In what direction is movement?

Sample C

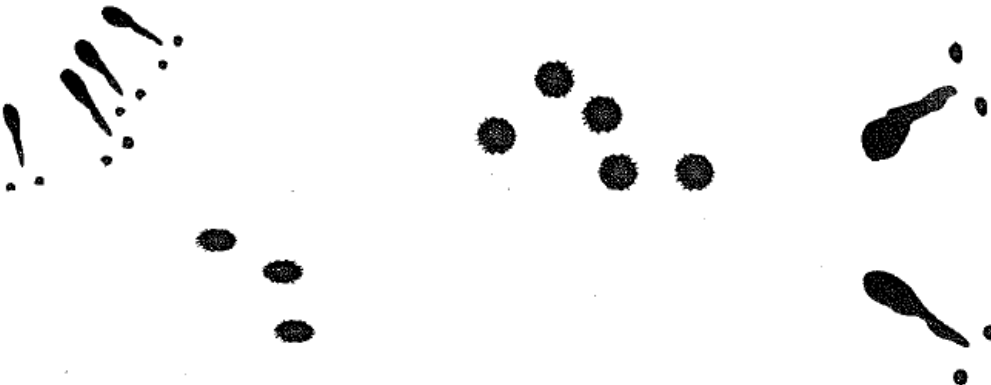


Note: circular drops are not considered part of the spatter pattern, just simply at a drop because they were dropped at 90°.

Describe what could have happened in this scene: (can show and explain on picture)

- How many individuals are involved?
- In what direction is movement?

Sample D



Describe what could have happened in this scene: (can show and explain on picture)

- How many individuals are involved?
- In what direction is movement?

**Question:**

Indicate which of these blood-spatter patterns (Sample A, B, C, or D) represents bleeding from:

- a bullet wound that caused bleeding as the bullet entered the body and as the bullet passed through the body of one individual
- two separate instances of bleeding, possibly from two different individuals
- a single wound from one individual
- a change in position of a victim after a wound has been inflicted