

CH9_001

ANSWER

BASIC RAY CAST

1 1 Casting a Ray

Finished Code:

```
// EXERCISE BEGINS HERE

// GOOD
//%startPos = %fromMarker.getPosition();
//%endPos    = %toMarker.getPosition();
//%hitObject = containerRayCast( %startPos, %endPos, -1, %fromMarker );

// BETTER
//%startPos = %fromMarker.getWorldBoxCenter();
//%endPos    = %toMarker.getWorldBoxCenter();
//%hitObject = containerRayCast( %startPos, %endPos, -1, %fromMarker );

// BEST
%startPos = %fromMarker.getWorldBoxCenter();
%endPos    = %toMarker.getWorldBoxCenter();
%hitObject = containerRayCast( %startPos, %endPos,
                               $TypeMasks::StaticShapeObjectType,
                               %fromMarker );

// EXERCISE ENDS HERE
```

Please notice that there are at least three solutions to this exercise.

Good - This answer uses the position of the markers and searches for all object types (-1). It does the job, but isn't very exact.

Better - This answer uses the center position of the markers and searches for all object types (-1). It does the job a little more accurately, but still finds too many objects.

Best - This answer uses the center position of the markers and searches only for StaticShapes, making it the most accurate and minimal solution.

BASIC RAY CAST

Answers:

1. A collision or an LOS mesh. Either will do.