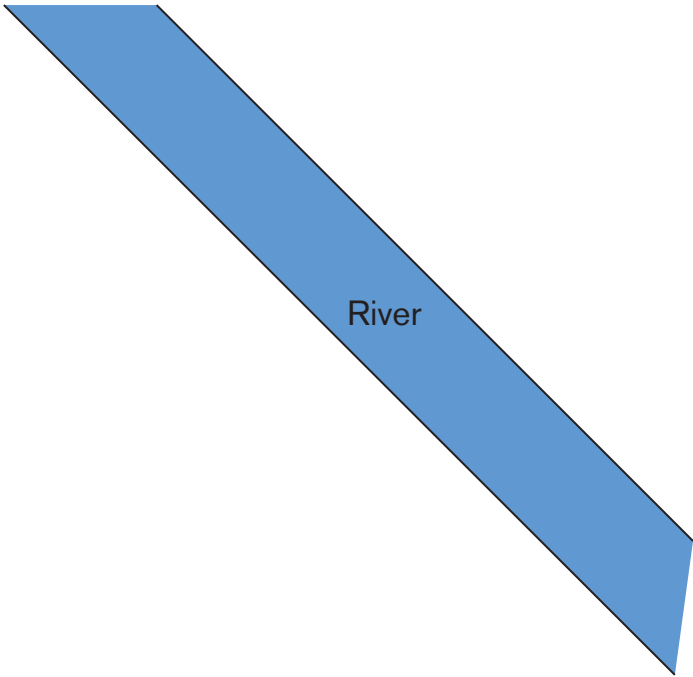


The fire-fighter

Problem sheet

A decision

A fire-fighter notices a fire starting, runs to the river to fill a bucket with water and then runs with the bucket to the fire. The fire-fighter decides to take the shortest all-round route from the start to the river bank and then to the fire. Where is the best place to fill the bucket?



● Fire

● Fire-fighter

Actual distances

Fire to river	120 m
Fire-fighter to river	80 m
Along river	100 m

Draw new positions for the river, the fire-fighter and the fire and investigate the position each time that gives the shortest route. Can you predict the position? Can you justify your prediction?