

# Cambridge Home Learning

## Answer Sheet

### Notes: Bike rides

9 to 11

#### Solution and notes

Jo gets back first and is 1 mile ahead.

Say Jo rides at 8 m.p.h.

She would take half an hour for each 4 mile section, a total time of 90 minutes.

From A to B Chris rode at twice Jo's speed, so would take half the time – 15 minutes.

From B to C Chris would take the same time as Jo – 30 minutes.

From C to A Chris rode at half Jo's speed so would take double the time – 1 hour.

Chris's total time would be 1 hour 45 minutes.

After 90 minutes Chris still has 1 mile to go.

#### Extension

Josh rode his bike to school at an average speed of 18 m.p.h.

He rode back home at an average speed of 9 m.p.h.

What was his average speed for the whole journey there and back?

Answer: 12 m.p.h.

Say the distance to school is 18 miles.

Josh would take 1 hour to go, and 2 hours to come back.

His average speed for the total distance would be  $36 \text{ miles} / 3 \text{ hours} = 12 \text{ m.p.h.}$

Apply knowledge of speed = distance/time  
Work out a strategy