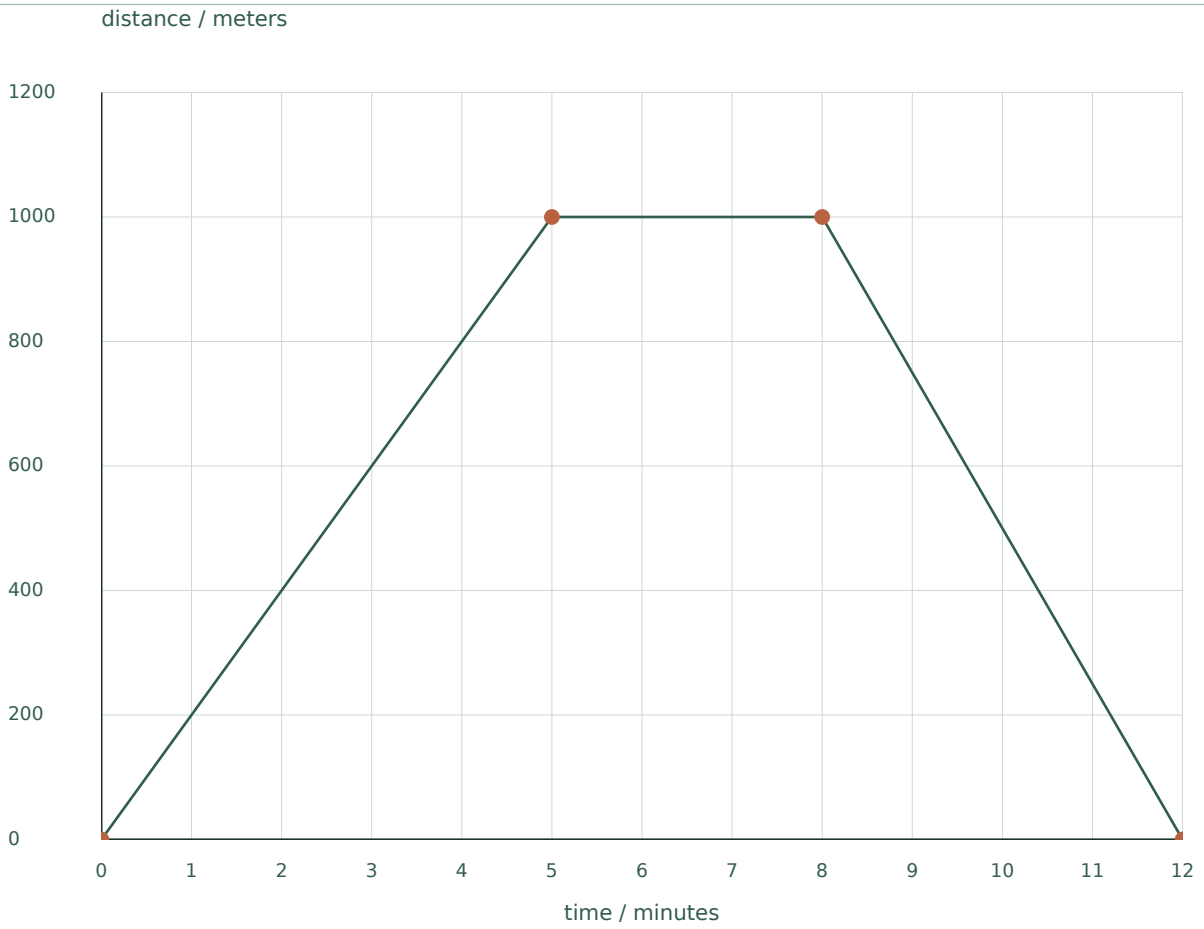
Drawing Real-Life Graphs: Distance-Time and Cost-Quantity Practice

Worked graph



Axis scales use the stated units independently. Segment endpoints and plateaus follow the original times, rates and fixed charges.

Drawing Real-Life Graphs: Distance-Time and Cost-Quantity Practice

Original worked example / unchanged complete key

Prompt: A cyclist starts 0 meters from home. She rides at a constant 200 meters per minute for 5 minutes, stops for 3 minutes, then rides back home at a constant 250 meters per minute. Draw a distance-time graph and find when she returns home.

Answer: Key points: (0 min, 0 m), (5 min, 1000 m), (8 min, 1000 m), and return to (12 min, 0 m). The return takes 1000 divided by 250 = 4 minutes, so she returns at 8 + 4 = 12 minutes. The graph has a rising segment from 0 to 5 minutes, a horizontal segment from 5 to 8 minutes, and a falling segment from 8 to 12 minutes ending at the horizontal axis.