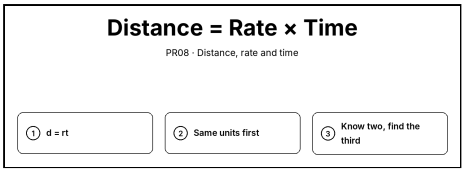
Distance = Rate × Time: teacher script

PR08-V1 · PR08 Distance, rate and time · teachers only. Without a screen, read each Say line and draw each Draw step on the board. About 69 seconds as a video.

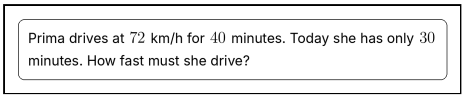
01



Say. Distance equals rate times time. Change to the same units first. Know two, and you can find the third.

Draw. Write the title “Distance = Rate × Time” and the steps: 1. d = rt; 2. Same units first; 3. Know two, find the third.

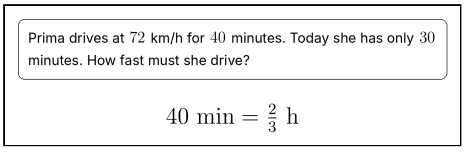
02



Say. Prima drives at 72 kilometres per hour for 40 minutes. Today she has only 30 minutes. How fast must she drive?

Draw. Clear the board. Write “Prima drives at 72 km/h for 40 minutes. Today she has only 30 minutes. How fast must she drive?” in a box at the top.

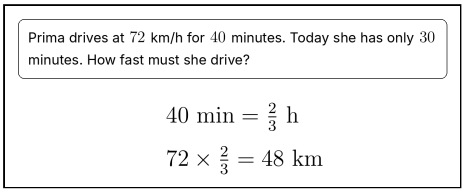
03



Say. The speed is per hour, so 40 minutes is two thirds of an hour.

Draw. Write 40 min = 2/3 h on the next line.

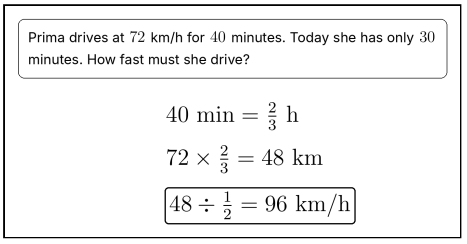
04



Say. The distance is 72 times two thirds: 48 kilometres.

Draw. Write 72 × 2/3 = 48 km on the next line.

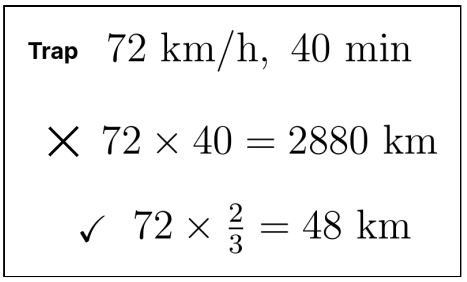
05



Say. In half an hour that needs 48 divided by one half: 96 kilometres per hour.

Draw. Write 48 ÷ 1/2 = 96 km/h and box it on the next line.

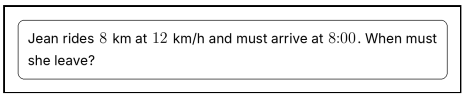
06



Say. Watch for the trap: mixing minutes and hours. Change minutes to hours first.

Draw. Clear the board. Write “Trap” and 72 km/h,\ 40 min. Below, write 72 × 40 = 2880 km and cross it out ×. Then write 72 × 2/3 = 48 km with a tick ✓.

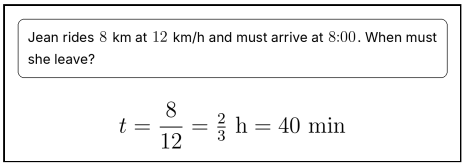
07



Say. Jean rides 8 kilometres at 12 kilometres per hour and must arrive at 8 o'clock. When must she leave?

Draw. Clear the board. Write “Jean rides 8 km at 12 km/h and must arrive at 8:00. When must she leave?” in a box at the top.

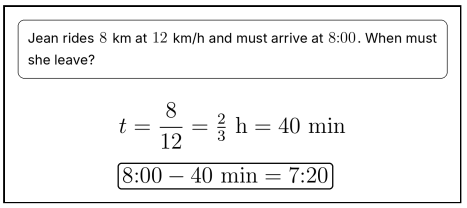
08



Say. Time is distance divided by rate: two thirds of an hour, which is 40 minutes.

Draw. Write t = 8/12 = 2/3 h = 40 min on the next line.

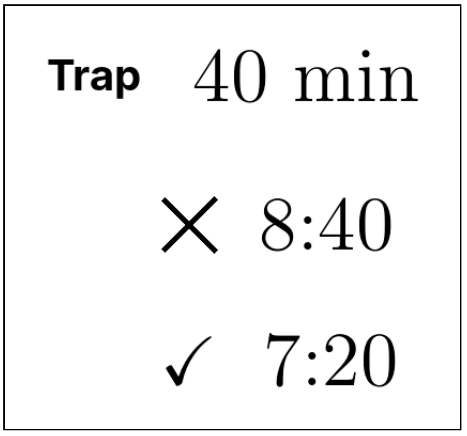
09



Say. 40 minutes before 8 o'clock is 7 20.

Draw. Write 8:00 − 40 min = 7:20 and box it on the next line.

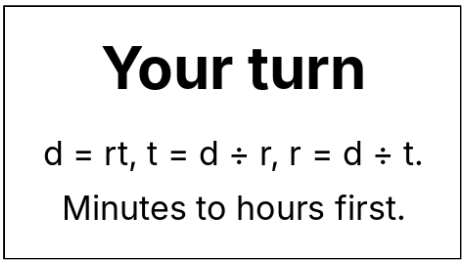
10



Say. Watch for the second trap: a length of time is not a time of day. She leaves before 8, not after.

Draw. Clear the board. Write “Trap” and 40 min. Below, write 8:40 and cross it out ×. Then write 7:20 with a tick ✓.

11



Say. Now it is your turn. Distance equals rate times time, and change minutes to hours first.

Draw. Point to today’s activity: d = rt, t = d ÷ r, r = d ÷ t. Minutes to hours first.