

PREC11

7.4 Extra (optional)

1. Emily can shovel the driveway in 25 min. It takes her younger brother Steve 40 min. If they worked together to shovel the driveway, how quickly will they finish (nearest tenth)?
2. Charlie and Rose share a garden. Charlie can weed the garden, working alone, in 90 min. Rose can finish the task in 75 min. If they work together, how long will it take them to weed the garden (nearest whole minute)?
3. Kyra mows a lawn in 40 min. When Mark and Kyra work together, they can mow the lawn in 24 min. How long would it take Mark to mow the lawn on his own?
4. The distance from Calgary to Red Deer is approximately 140 km. Some friends leave Calgary at noon, drive to Red Deer, have a half hour break, and then return to Calgary. They arrive at 3:15 pm. Traffic is busier on the return trip, so their average speed is 10 km/h slower than on the outbound trip. What is the average speed of each portion of the trip?
5. Marieke and Kate canoe 8 km up a river (against the current) and 8 km back (with the current). The total paddling time is 2.5 h. If the speed of the current is 2.6 km/h, what is their average speed in still water? How long does it take them to paddle upstream?
6. Henry's average running speed is 1 km/h greater than Brandon's. In a 10-km practice race, Brandon finished 2 min behind Henry. Determine the average running speed of each person.

KEY

1. 15.4 min
2. 41 min
3. 60 min
4. Outbound 107 km/h; Inbound 97 km/h
5. 7.3 km/h; 1 h 42 min
6. Brandon 16.8 km/h; Henry 17.8 km/h