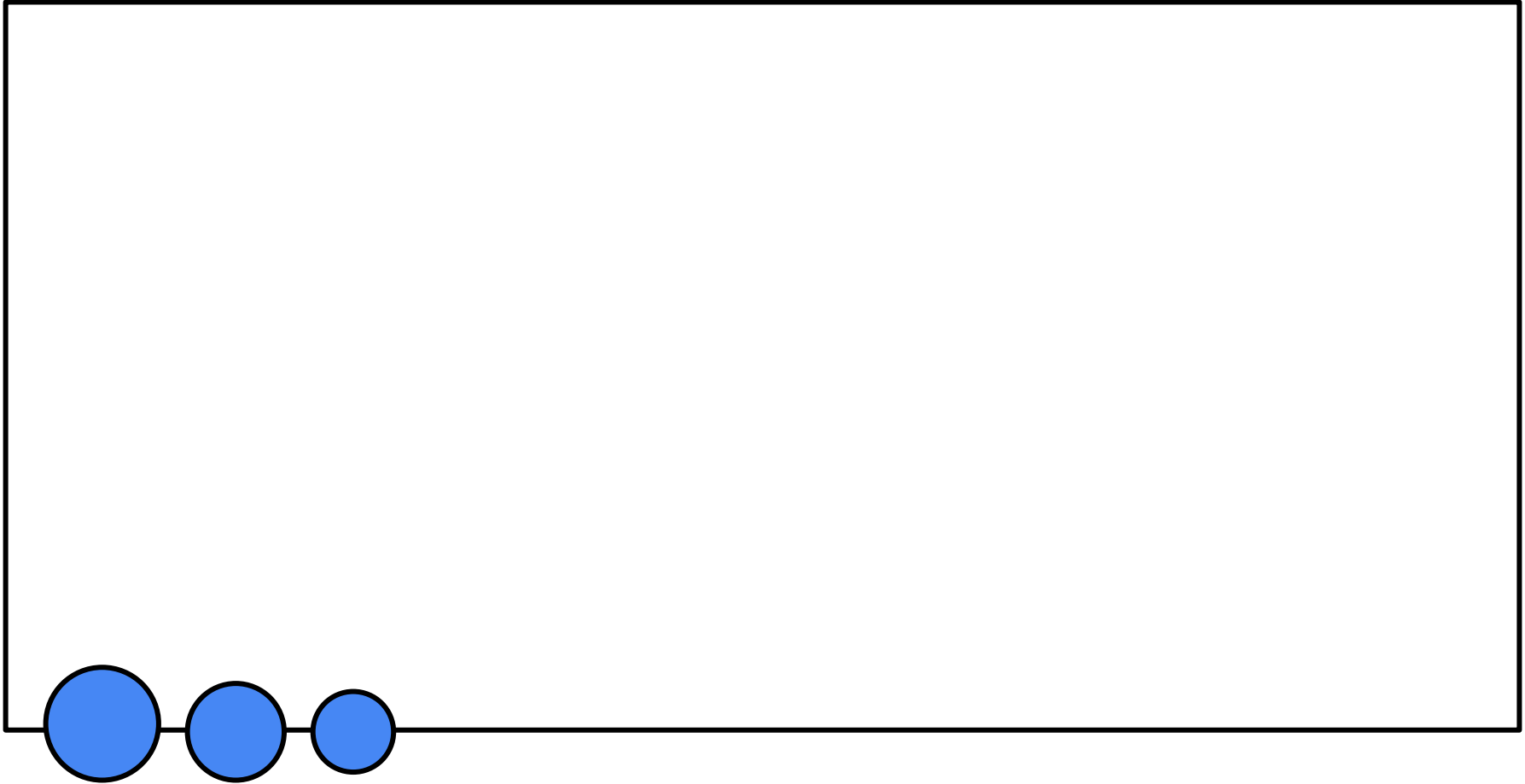




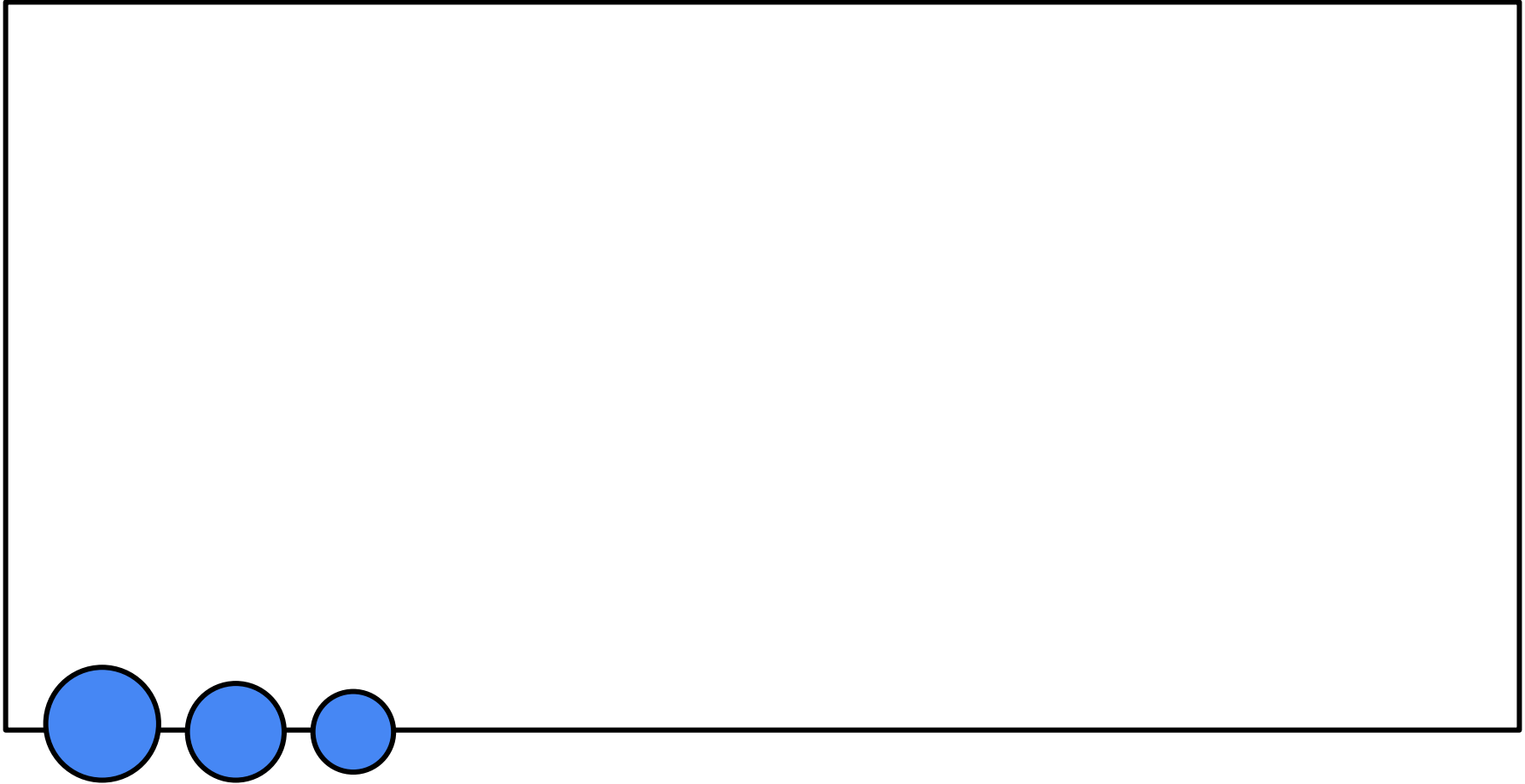
TIME & DISTANCE



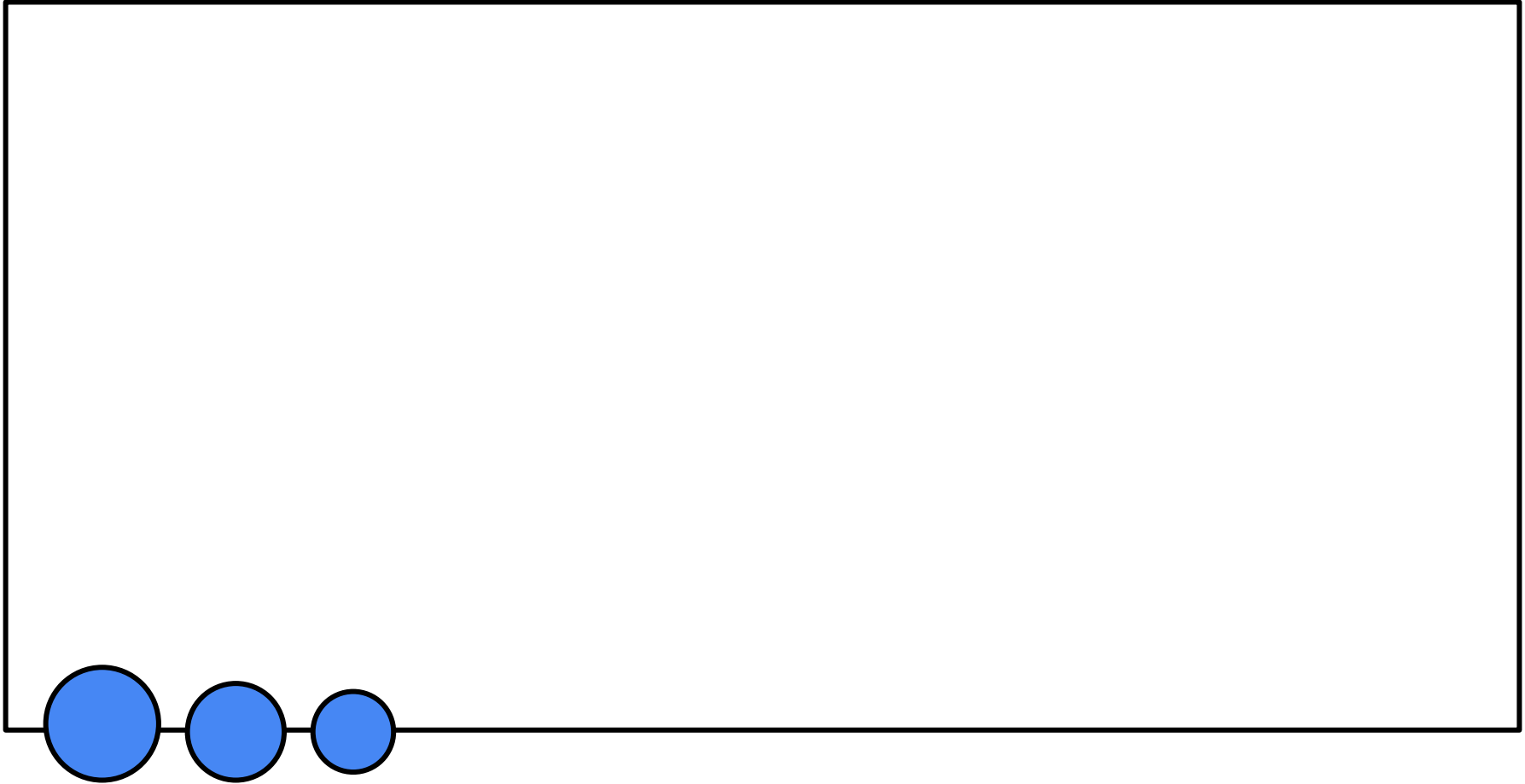
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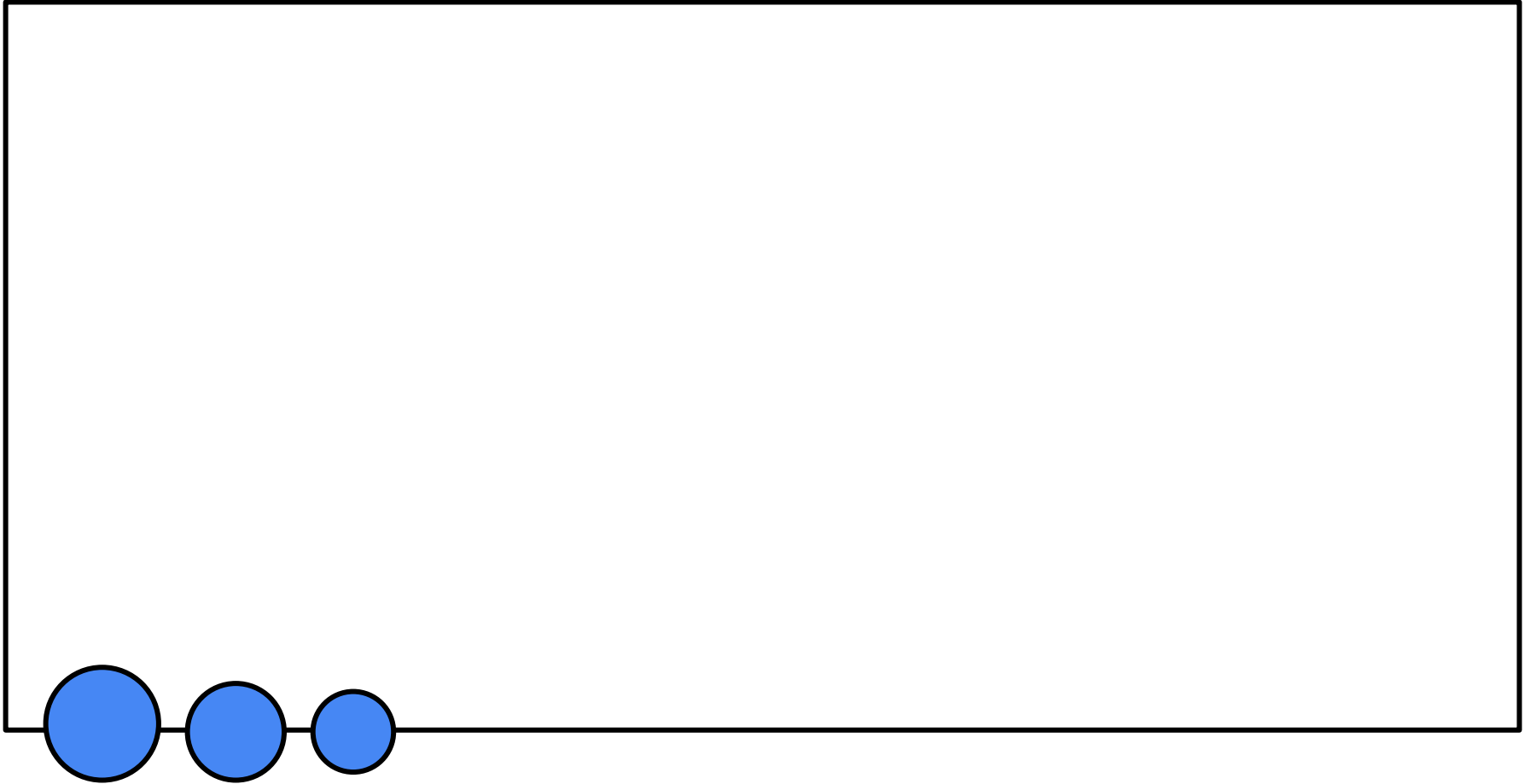
TIME & DISTANCE



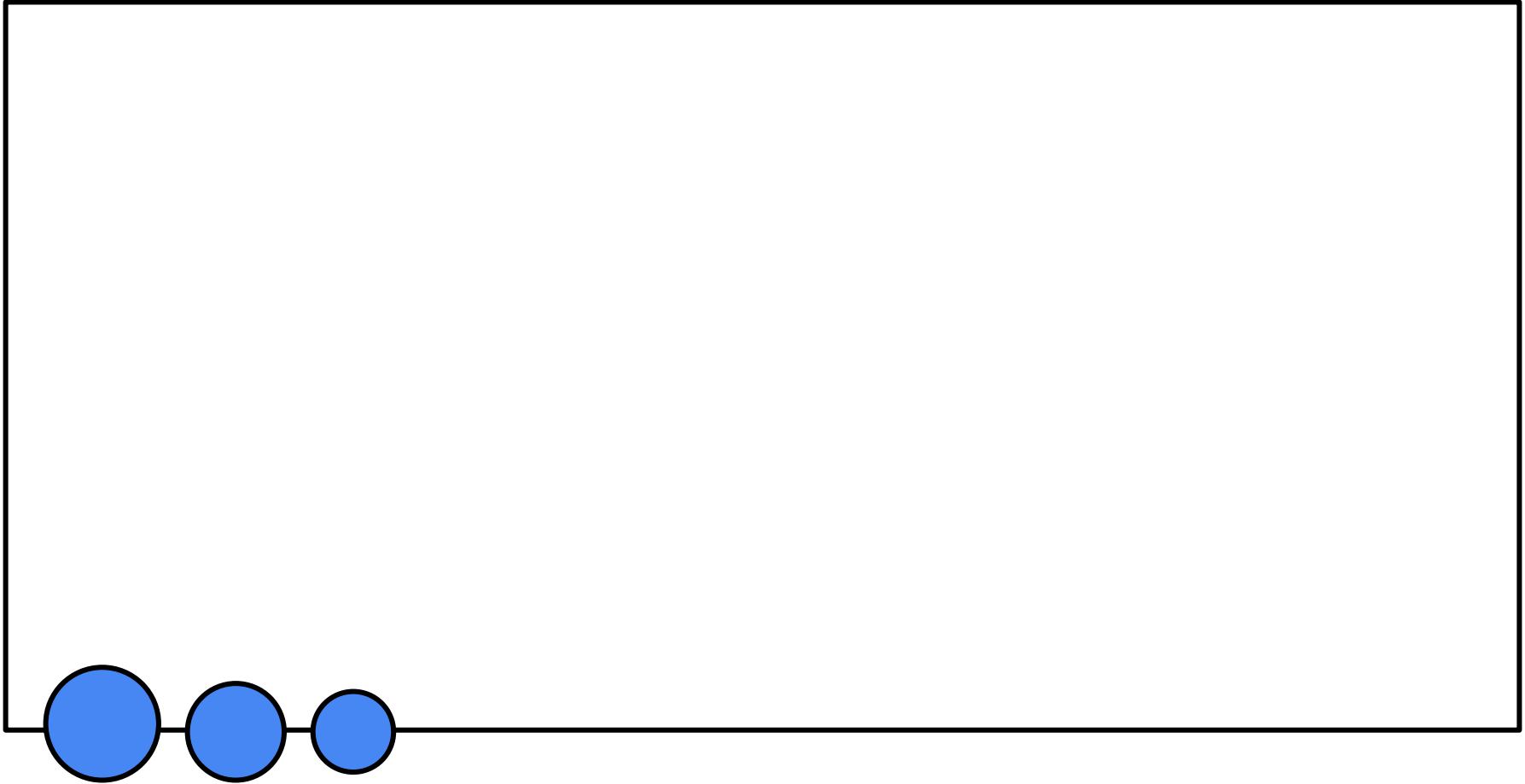
TIME & DISTANCE



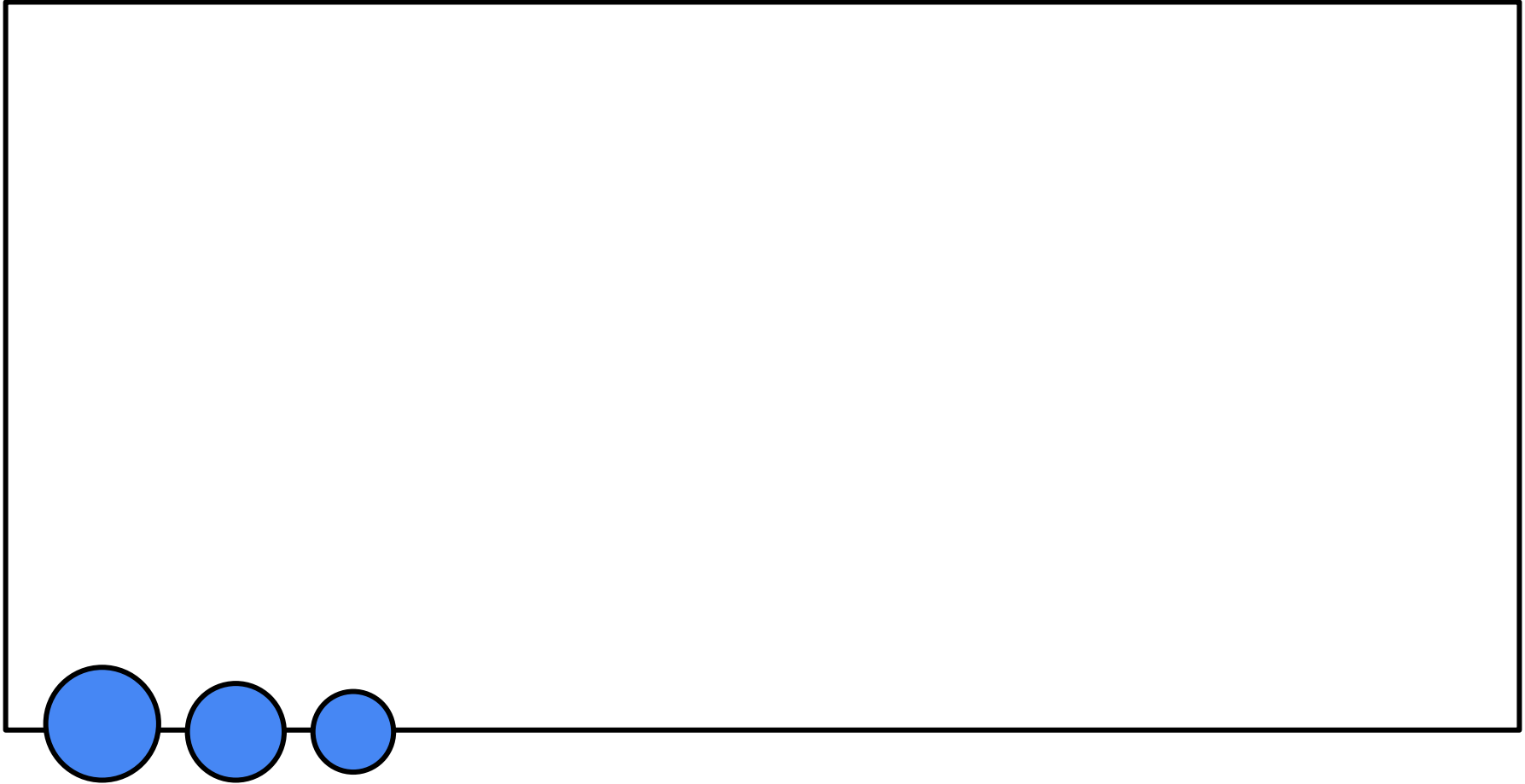
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TIME & DISTANCE

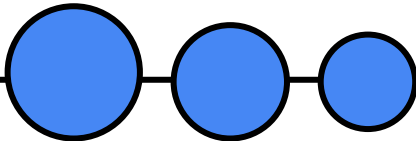


TIME & DISTANCE



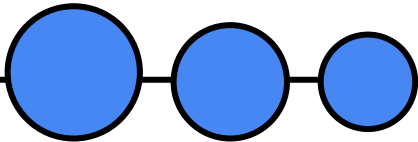


Class Questions



P starts chasing a Q, 3 hrs after the Q starts running. P takes 4 hours to catch the Q. If the average speed of the P is 35 kmph, Find the average speed of the Q ? (in kmph)

A. 30 B. 16 C. 20 D. 24



Two cars start from a place with a speed of 40 kmph at an interval of 10 minutes. What is the speed of a man coming from the opposite direction towards the place if he meets the cars at an interval of 8 minutes? (in kmph)

- A. 10 B. 13 C. 14 D. 16



Waking $\frac{3}{4}$ of his normal speed, Ravi was 18 minutes late in reaching his office. The usual time took to cover the distance between his home and office was:

A. 36 min B. 24 min C. 42 min D. 54 min





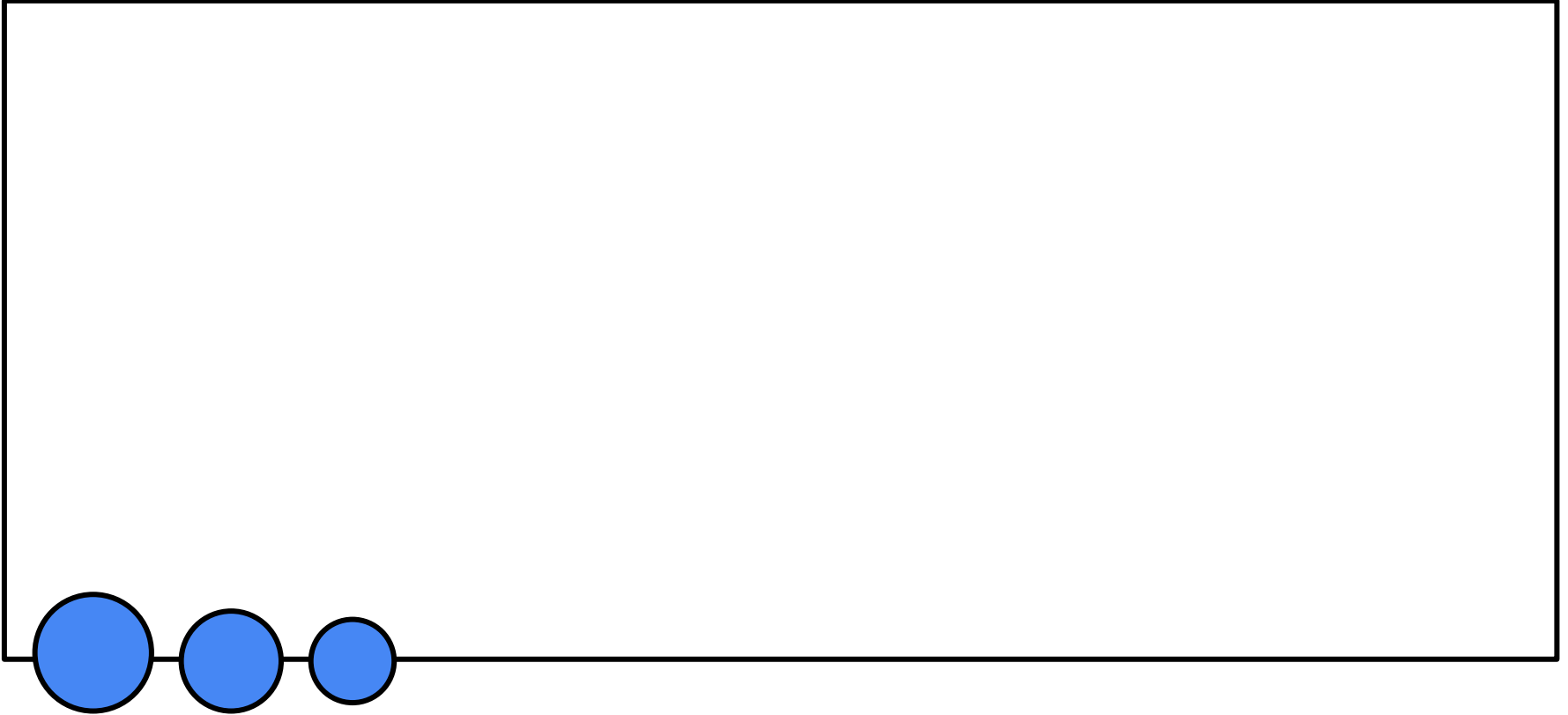
Two Rabbits started running towards each other, one from A to B and another from B to A. They cross each other after 1.2 hours and the first Rabbit reaches B, 1 hour before the second rabbit reaches A. If the distance between A and B is 60 km, what is the speed of the slower rabbit? (in kmph)

- A. 10 B. 15 C. 25 D. 20



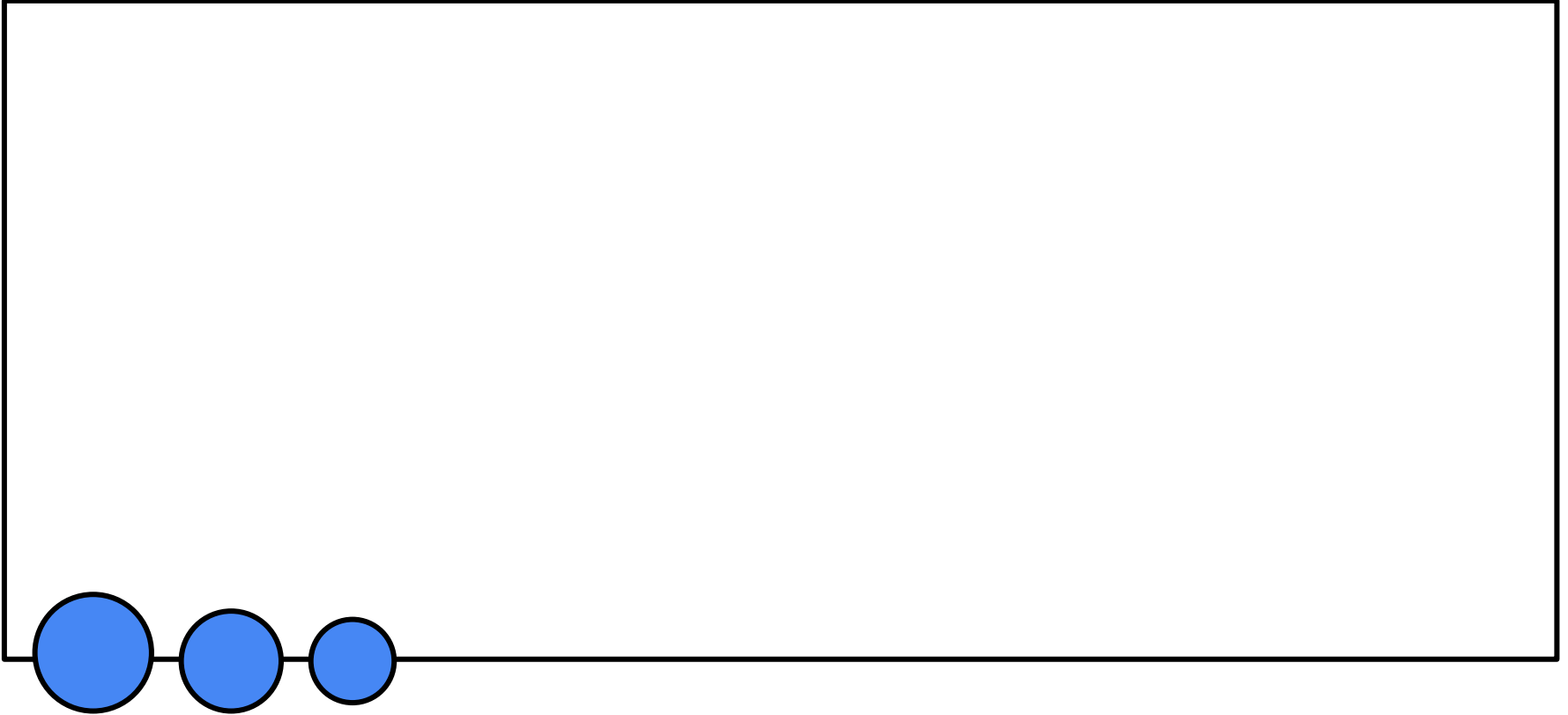
The ratio between the speed of a train and a car is 18:3 respectively. Also, a bus covered a distance of 480 kms in 12 hours. The speed of the bus is five-ninths the speed of the train. How much distance will the car cover in 5 hours?

- A. 50 kms B. 80 kms C. 75 kms D. 60 kms



Vikcy can row a certain distance downstream in 14 hours and return the same distance in 21 hours. If the speed of the stream is 6 kmph, Find the speed of Vicky in the still water? (in kmph)

- A. 21 B. 15 C. 30 D. 35



A boat covers a distance of 135 km downstream in 9 hours. To cover the same distance upstream, the boat takes 6 hours longer. What is the speed of the man in still water? (in kmph)

- A. 12 B. 10 C. 14 D. 15



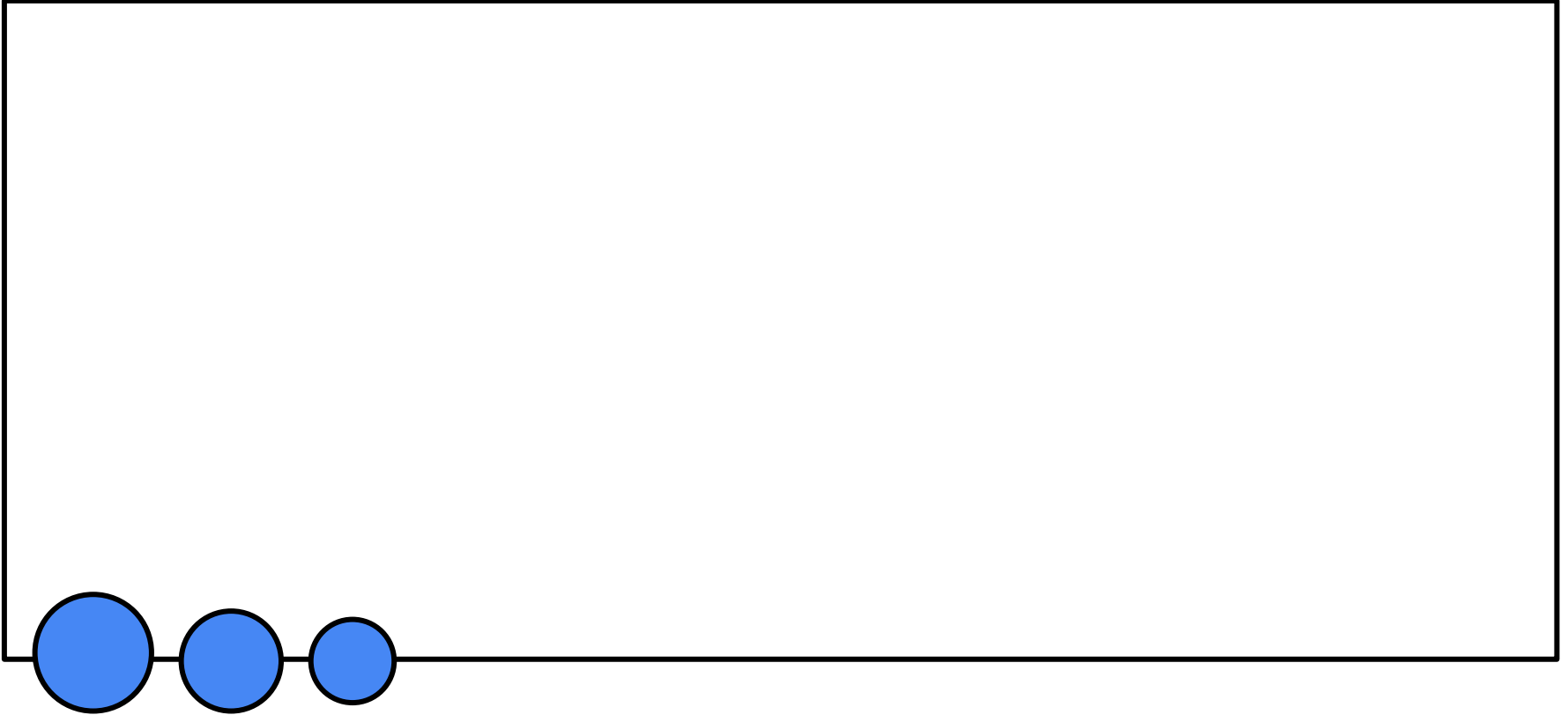
A boat can travel 55 km downstream in 66 min. The ratio of the speed of the boat in still water to the speed of the stream is 4:1. How much time will the boat take to cover 72 km upstream?

A. 2 HR 48 MIN

B. 3 HR 12 MIN

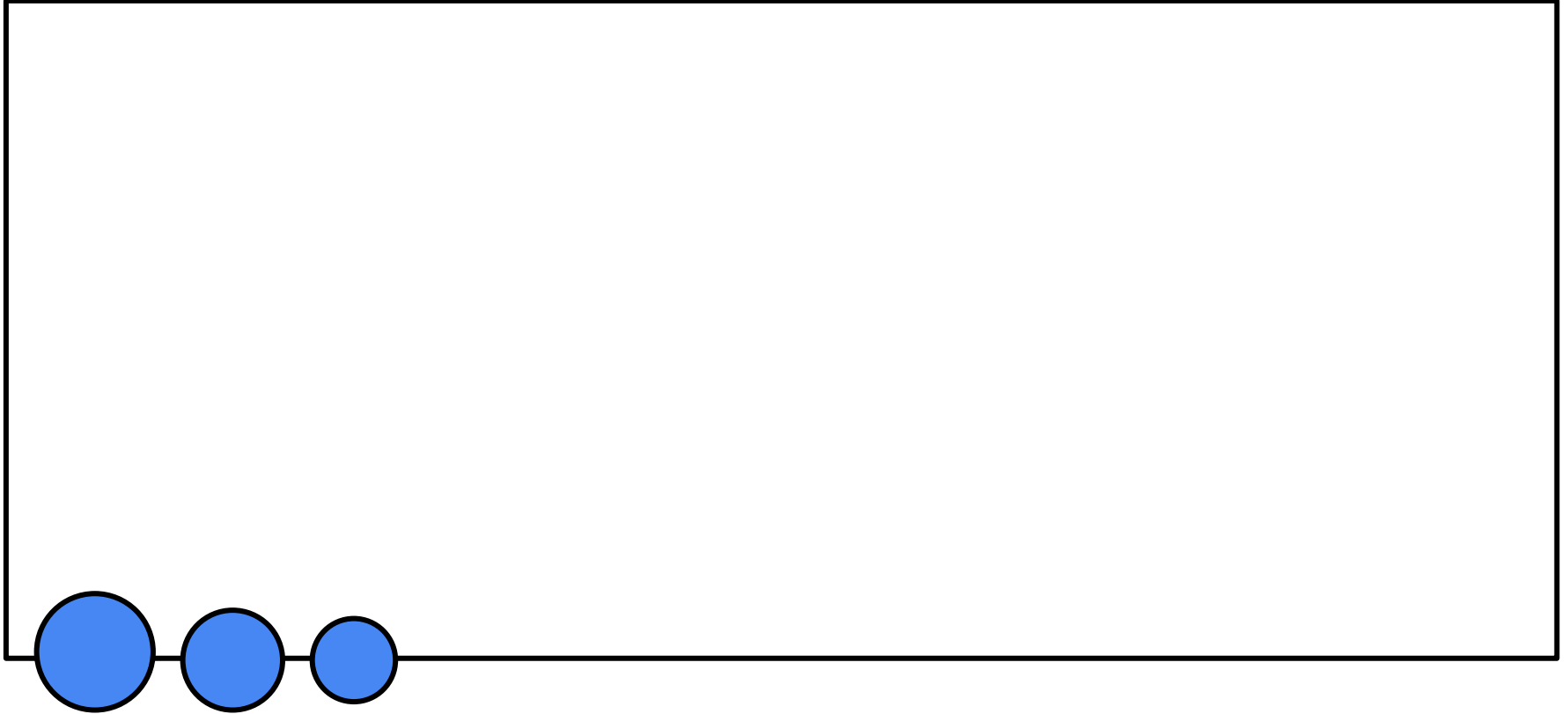
C. 2 HR 24 MIN

D. 3 HR 28 MIN



A boat can cover 42 km upstream in 63 minutes. If the speed of the current is $\frac{3}{7}$ of the boat in still water, then how much distance (in km) can the boat cover downstream in 42 minutes?

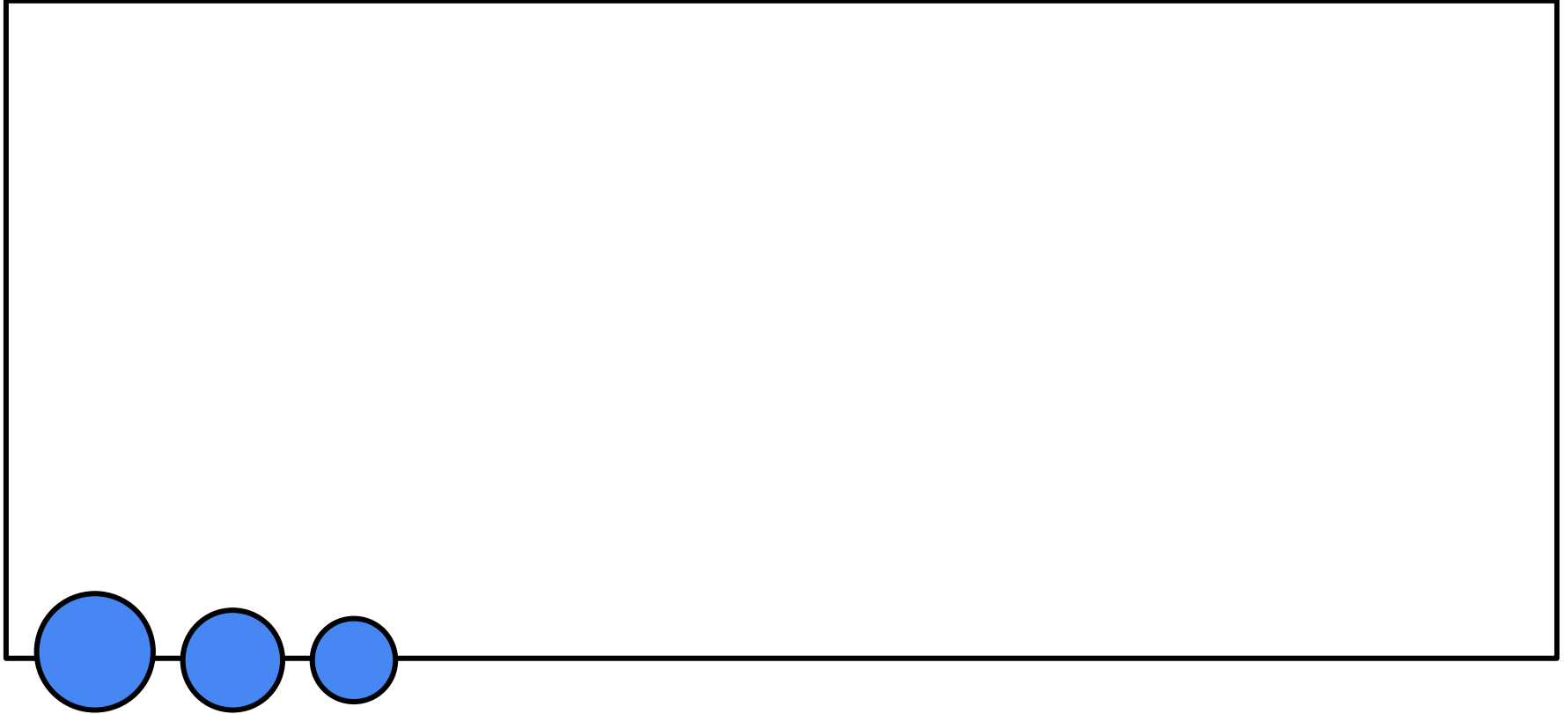
A. 70 km B. 66 km C. 52 km D. 84 km





A boat takes 26 hours for travelling downstream from point A to point B and coming back to point C midway between A and B. If the velocity of the stream is 8 km/hr and the speed of the boat in still water is 20 km/hr, then find the distance between A to B?

- A. 284 km B. 212 km C. 336 km D. 198 km



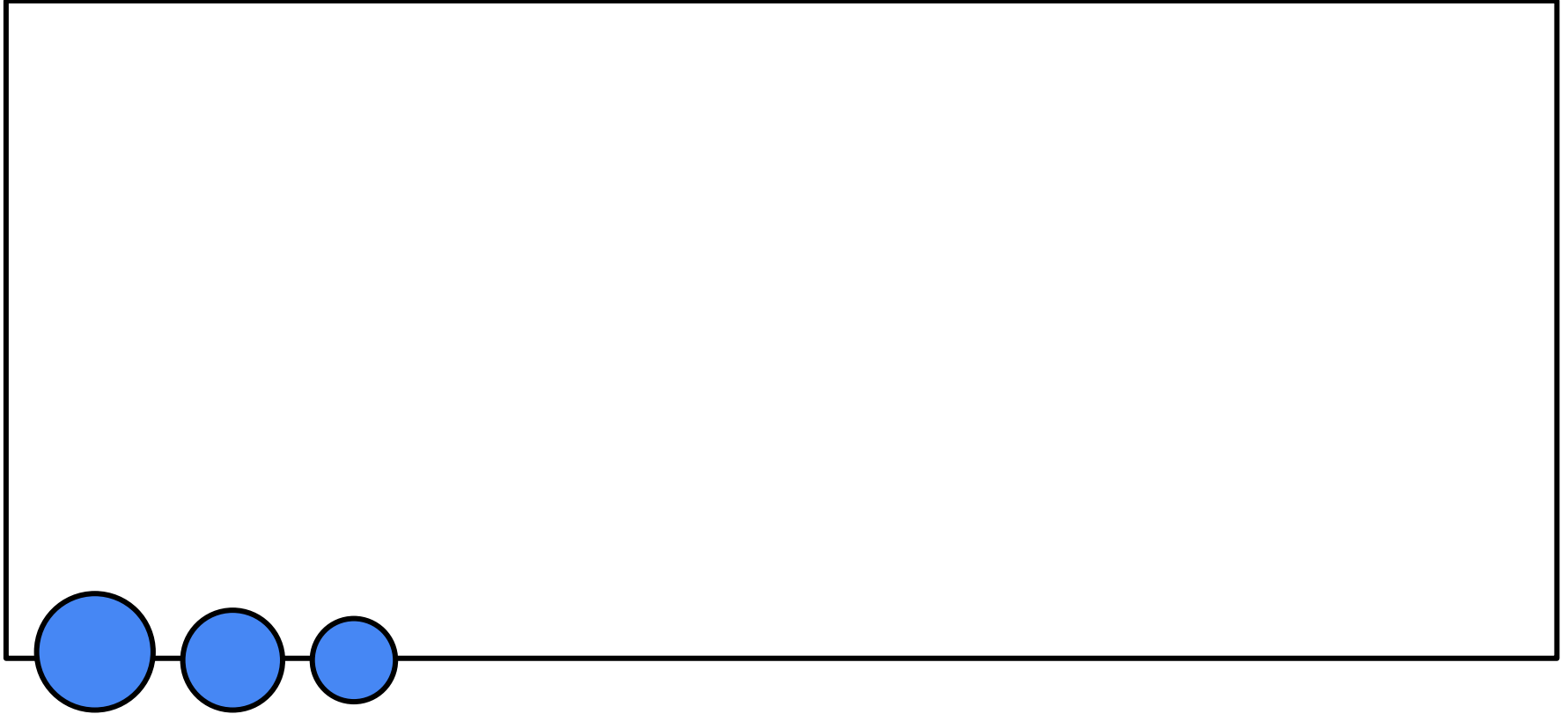
A train 200 m long running at 36 kmph takes 55 seconds to cross a bridge. The length of the bridge is

A. 375 m

B. 300 m

C. 350 m

D. 325 m



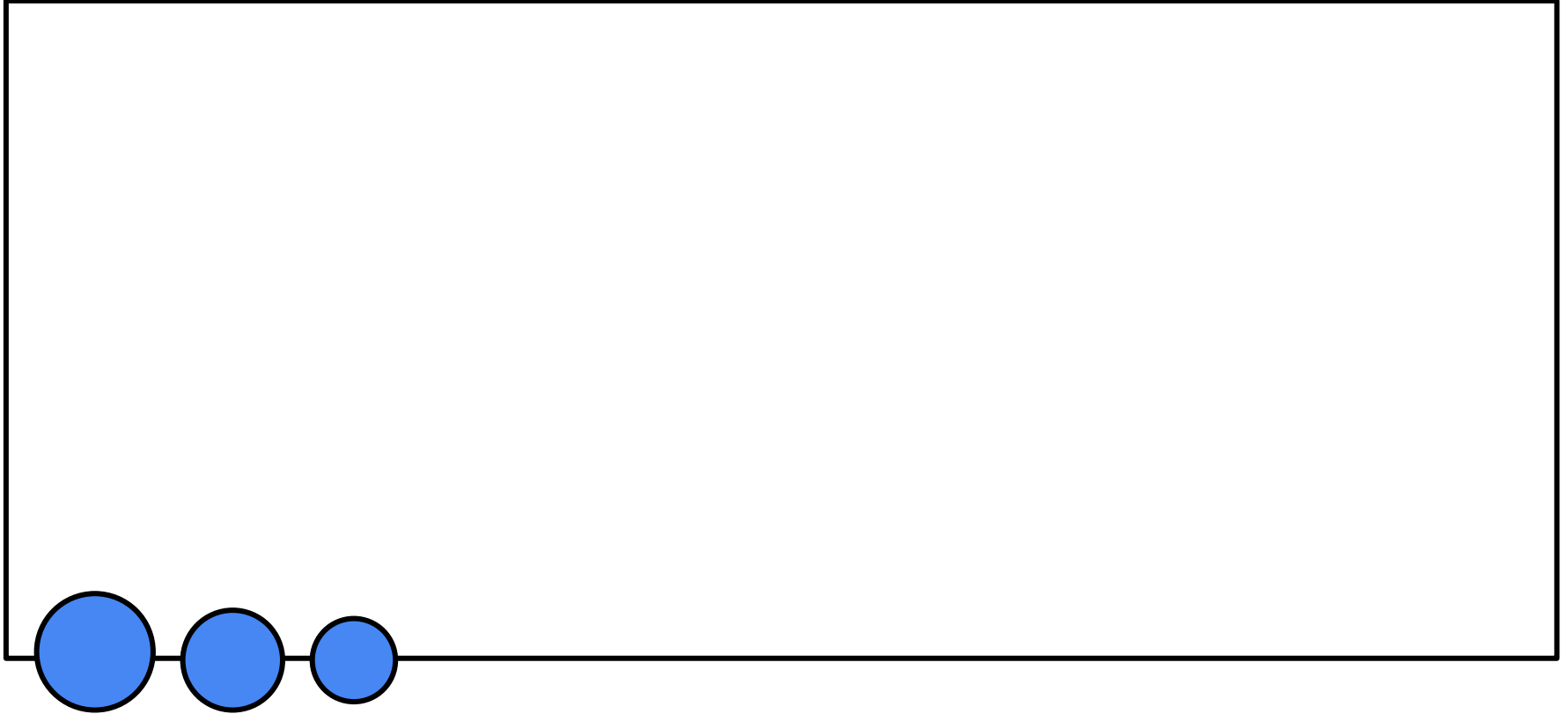
A train travels a distance of 600 km at a constant speed. If the speed of the train is increased by 5 km/hr, the journey would take 4 hrs less. Find the speed of the train.

A. 100 kmph

B. 25 kmph

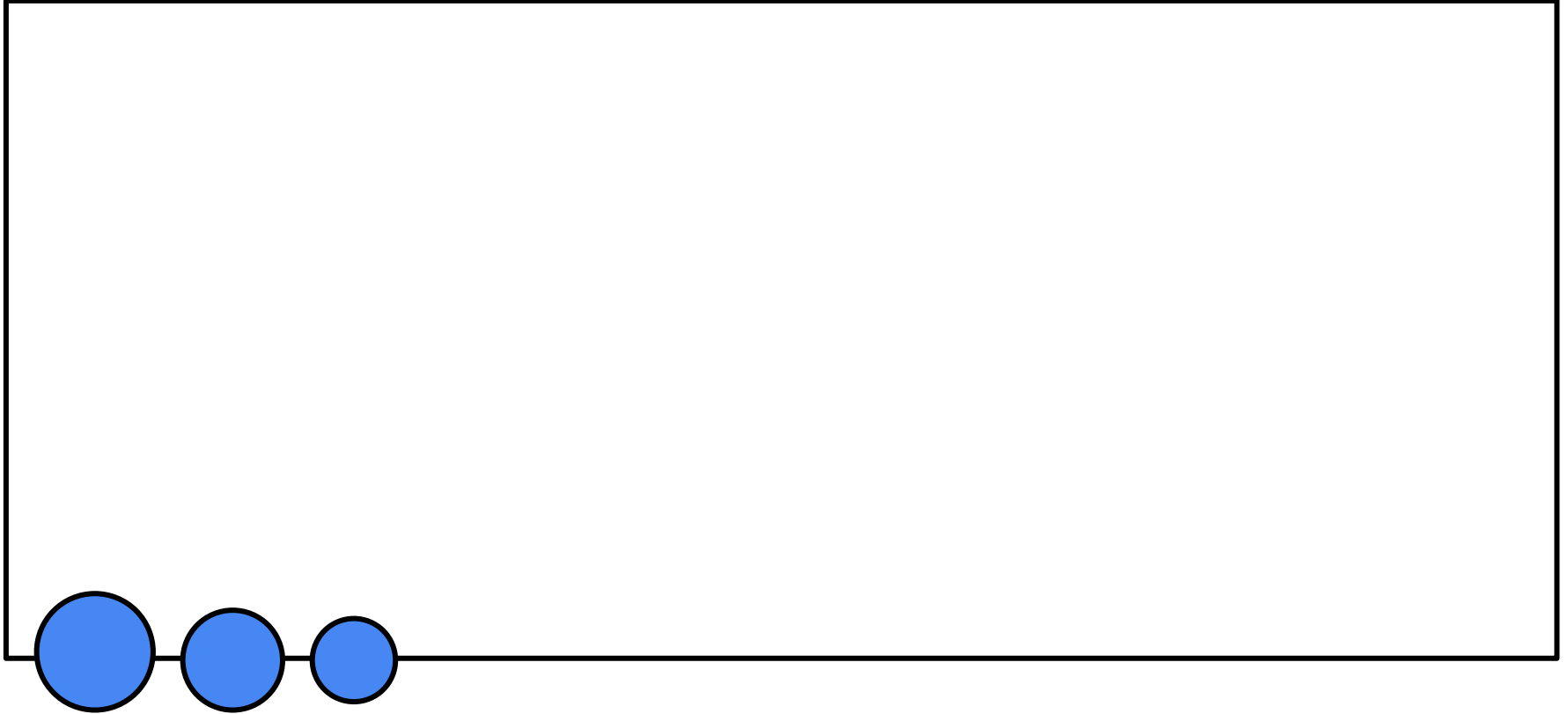
C. 50 kmph

D. 40 kmph



Two trains are running at 60 km/hr and 40 km/hr respectively in the same direction. Faster train completely passes a man sitting in the slower train in 54 seconds. What is the length of the fast train?

- A. 100 m B. 150 m C. 300 m D. 200 m



A train Express A leaves Delhi at 5 a.m and reaches Mumbai at 9 a.m. Another train Express B leaves Mumbai at 7 a.m and reaches Delhi at 10.30 a.m. At what time do they cross each other after 7 a.m?

A. 50 m

B. 52 m

C. 54 m

D. 56 m





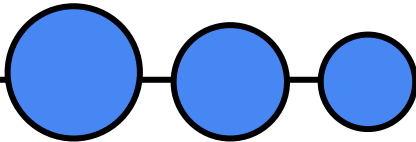
A train travelled from Delhi to Agra and back in a certain time at the rate of 40 kmph. But if the train had travelled from Delhi to Agra at a rate of 80 kmph and back to Delhi at a rate of 40 kmph. It would takes 1h longer. Find the distance between Delhi and Agra ?

- A. 460 km B. 465 km C. 160 km D. 470 km





Assignment Questions



Nakiren travelled 1,200 km by air which formed $\frac{2}{5}$ of his trip. One third of the whole trip, he travelled by train and the rest of the journey by car. Find the distance travelled by car?

A. 850 km

B. 800 km

C. 700 km

D. 650 km



Mr. Ravi completes a certain journey by a car. If he covered 40% of the distance at the speed of 20 kmph, 50% of the distance at 25 kmph and the remaining of the distance at 10 kmph, then what will be the speed? (in kmph)

- A. 15 B. 20 C. 18 D. 14





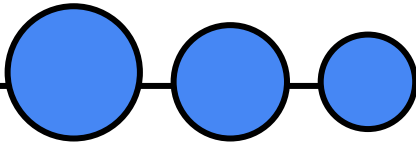
Ajay walked at 10 kmph for certain part of the journey and then he took an auto for the remaining part of the journey travelling at 30 kmph. If he took 10 hours for the entire journey, what part of journey did he traveled by auto if the average speed of the entire journey be 18 kmph?

A. 132 km

B. 145 km

C. 128 km

D. 120 km





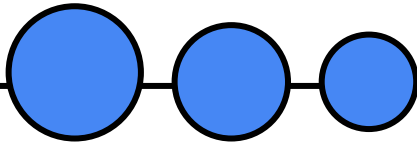
Two buses start at same time from Chennai and Bangalore, which are 250km apart. If the two buses travel towards each other, they meet after 1hr and if they travel in same direction they meet after 5 hrs. What is the speed of the bus starts from Chennai if it is know that the one which started from Chennai has more speed than the other one?

A. 150

B. 100

C. 45

D. 80





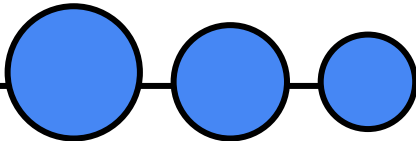
A car traveled 80% of the distance from town A to B by traveling at T hours at an average speed of V km/h. The car travels at an average speed of S km/h for the remaining part of the trip. Which of the following expressions represents the average speed for the entire trip? (in kmph)

A. $12VS/(9V+S)$

B. $5VS/(4S+V)$

C. $VT/3S$

D. $9VS/(4S+V)$



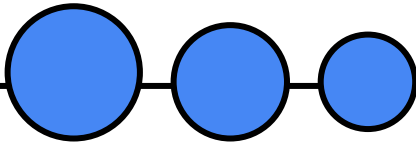
Rahul can row a certain distance downstream in 12 hour and return the same distance in 18 hour. If the speed of Rahul in still water is 12 kmph, find the speed of the stream? (in kmph)

A. 2.1

B. 1.5

C. 4.4

D. 2.4



Mahesh can swim at 20 km/hr in still water. The river flows at 8 km/hr and it takes 8 hours more upstream than downstream for the same distance. How far is the place?

- A. 168 km B. 152 km C. 140 km D. 124 km



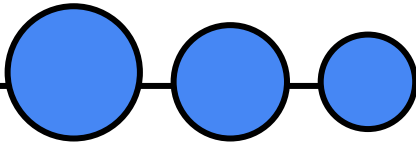
A boat can travel 4 km upstream in 15 min. If the ratio of the speed of the boat in still water to the speed of the stream is 9:5. How much time will the boat take to cover 28 km downstream?

A. 42 min

B. 30 min

C. 36 min

D. 44 min



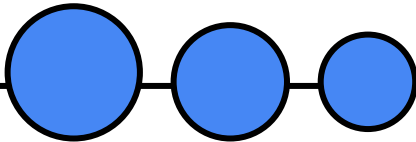
A man can row a boat at a speed of 10 km/hr in still water. He goes to a certain point upstream and back to the starting point in a river. The speed of the flowing water is 4 km/hr. What is the average speed of the boat for that journey? (in kmph)

A. 9.2

B. 8.4

C. 9.6

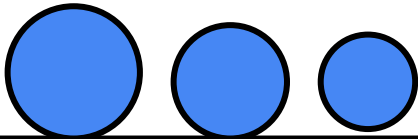
D. 7.2





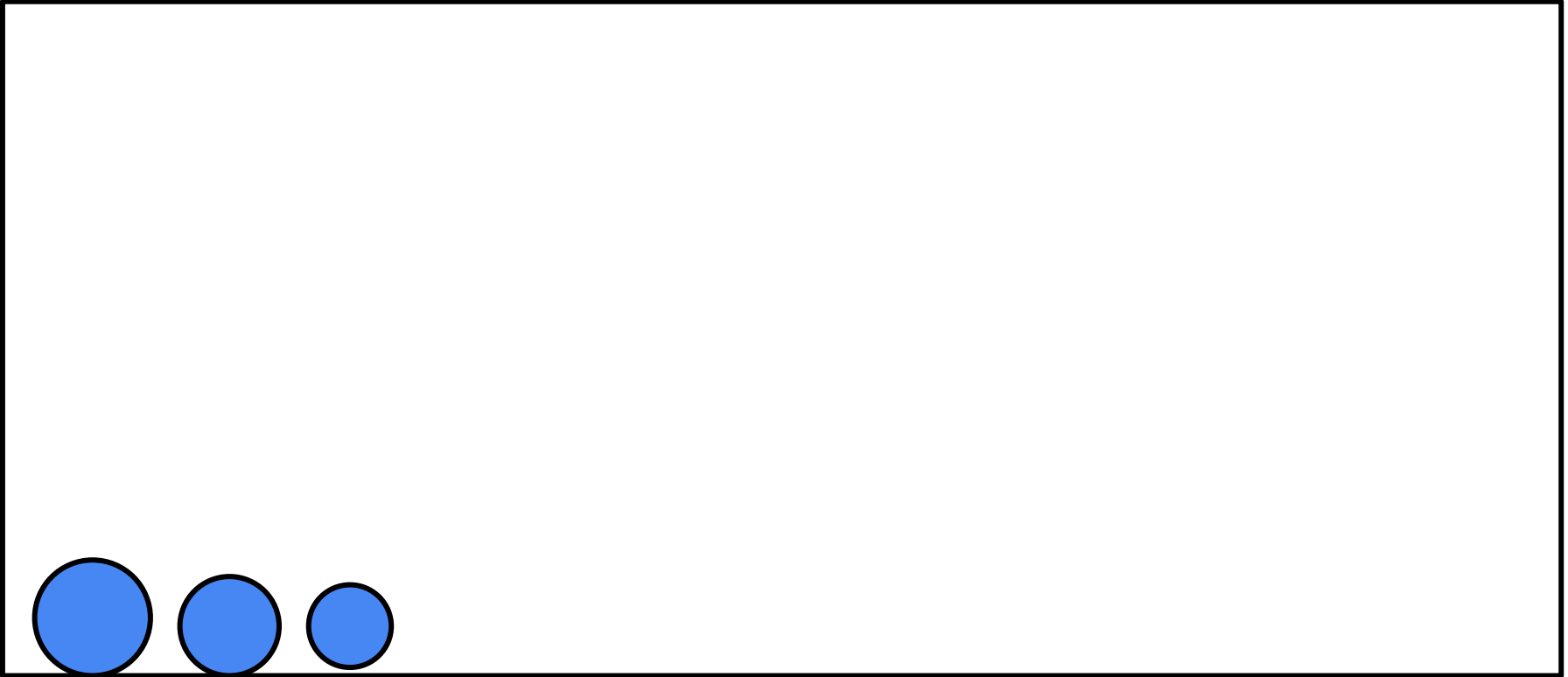
The speed of a boat in still water is 18 km/hr and the speed of the stream is 3 km/hr. It takes a total 11 hours to row upstream from point X to Point Y and downstream from Point Y to Point Z. If the distance from X to Y is one third of the distance between Y and Z. What is the total distance travelled by the boat (both upstream and downstream)?

- A. 190 km B. 180 km C. 210 km D. 170 km



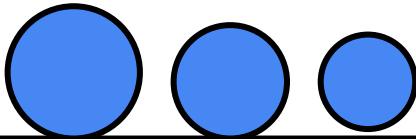
A train 250 m long takes 30s to cross a man running at a speed of 6 kmph in the direction opposite to that of train. What is the speed of the train?

A. 20 kmph B. 22 kmph C. 23 kmph D. 24 kmph



Two trains one from Hyderabad to Cochin and another from Cochin to Hyderabad start simultaneously. After they meet, Trains reach their destinations after 4 hrs and 9 hrs respectively. Find the ratio of the speeds

- A. 1:2 B. 3:2 C. 2:3 D. 2:1



The distance between 2 stations are 800 km. One train starts at 5 am from A with 62 kmph. Another train starts at 7 am from B at 50 kmph. When they will meet?

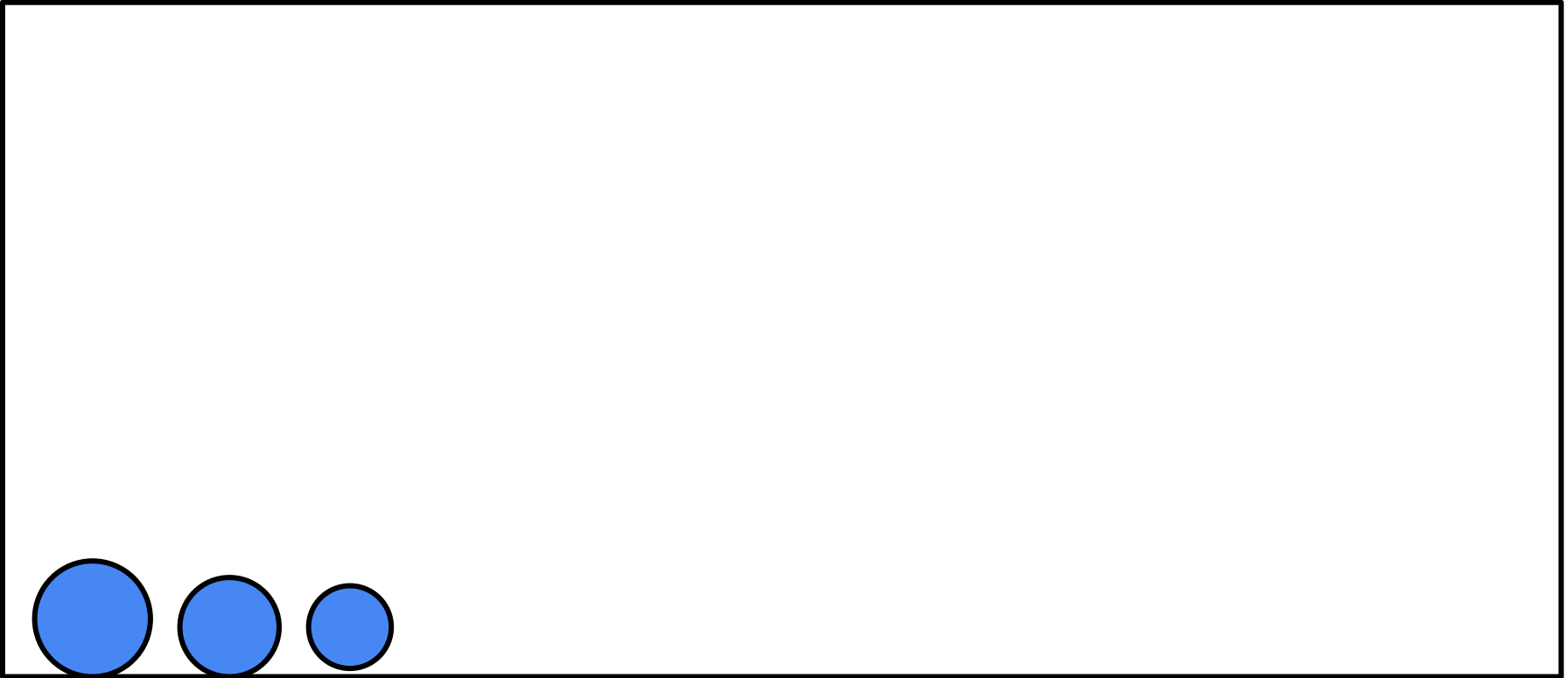
- A. 12.3 pm B. 1.30 pm C. 1.03 pm D. 2.32 pm





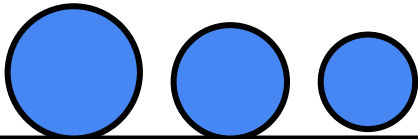
A train can travel 20% faster than a bus. Both start from the point A at the same time and reach point B 75 km away from A at the same time. But the train stopped for 12.5 minutes while stopping at the stations. Find the speed of the bus in km/hr.

- A. 50 B. 55 C. 60 D. 65



Two train starts at the same time from Delhi and Agra and proceed towards each other at the rate of 40 km/hr and $37\frac{1}{2}$ km/hr. When they meet it is found that one train has traveled 200 km more than the other train. What is the distance between Delhi and Agra?

- A. 6200 km B. 5000 km C. 4200 km D. 4800 km





Thank you

