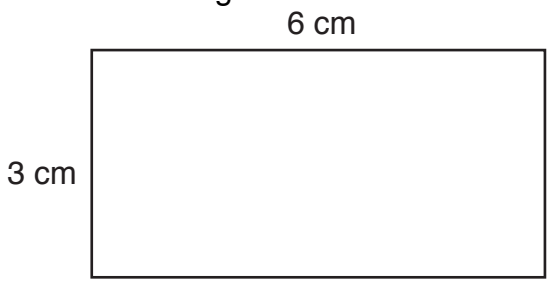
Area under a graph 1

H

*

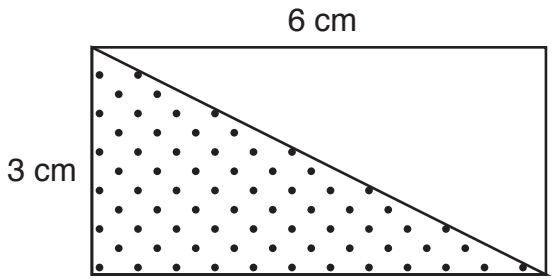
1 Here is a rectangle.



Calculate the area.

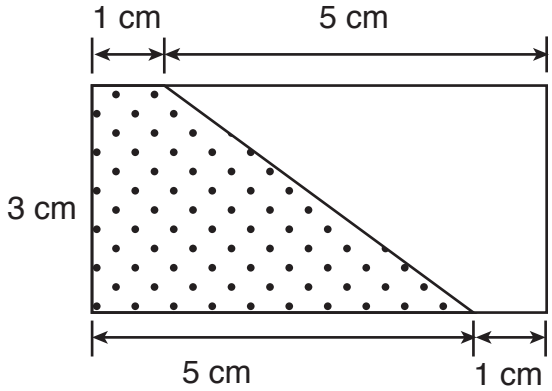
Answer _____ cm²

2 Calculate the shaded area.



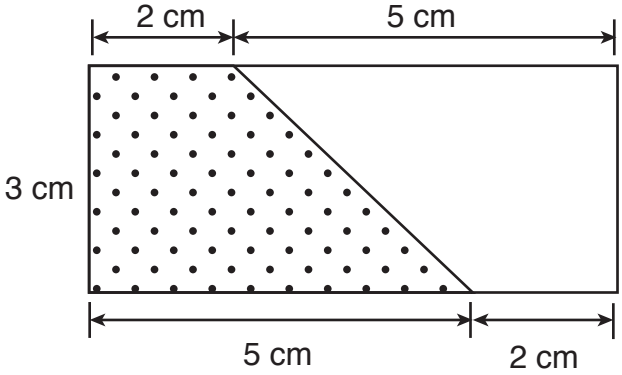
Answer _____ cm²

3 Calculate the shaded area



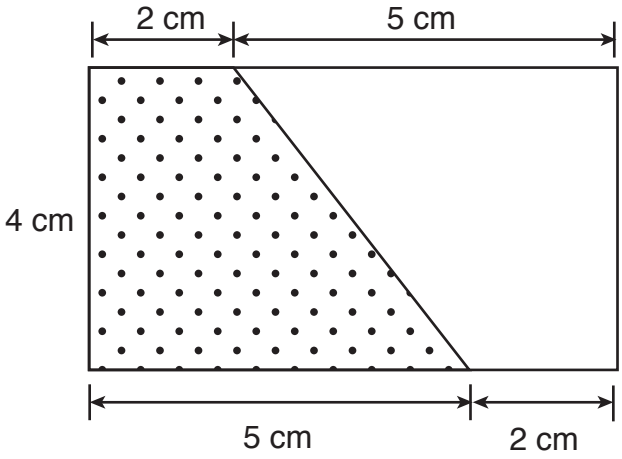
Answer _____ cm²

4 Calculate the shaded area.



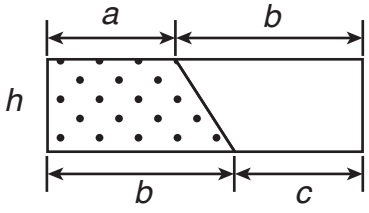
Answer _____ cm²

5 Calculate the shaded area.



Answer _____ cm²

6 Write a formula for the area of this trapezium.



Answer _____

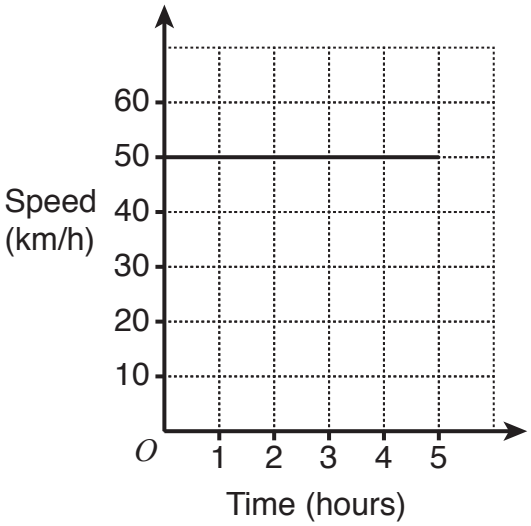
Area under a graph 2

H

*

The area under a speed-time graph gives the distance travelled.

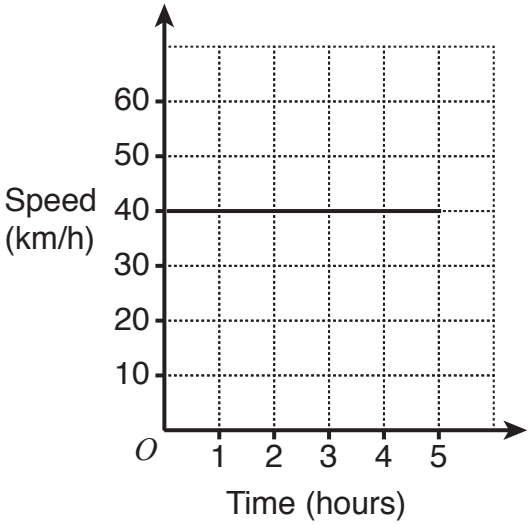
1 Here is the speed-time graph for a car.



Calculate the distance travelled during 5 hours.

Answer _____ km

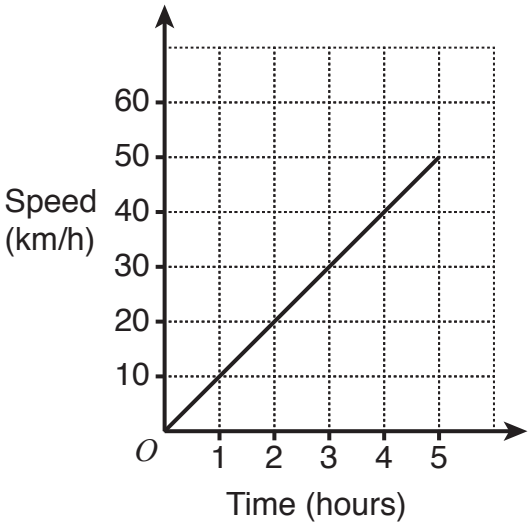
2 Here is the speed-time graph for a car.



Calculate the distance travelled during 5 hours.

Answer _____ km

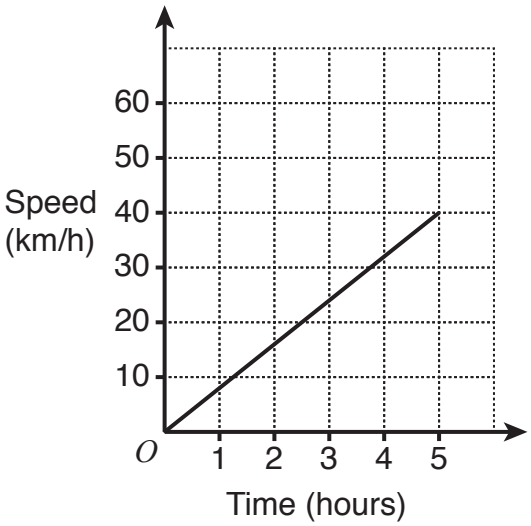
3 Here is the speed-time graph for a car.



Calculate the distance travelled during 5 hours.

Answer _____ km

4 Here is the speed-time graph for a car.



Calculate the distance travelled during 5 hours.

Answer _____ km

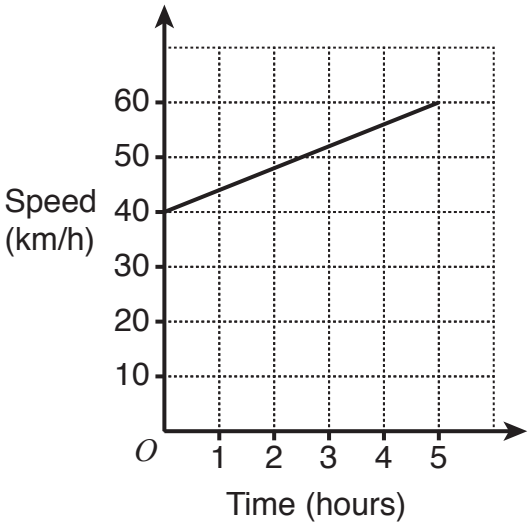
Area under a graph 3

H

*

The area under a speed-time graph gives the distance travelled.

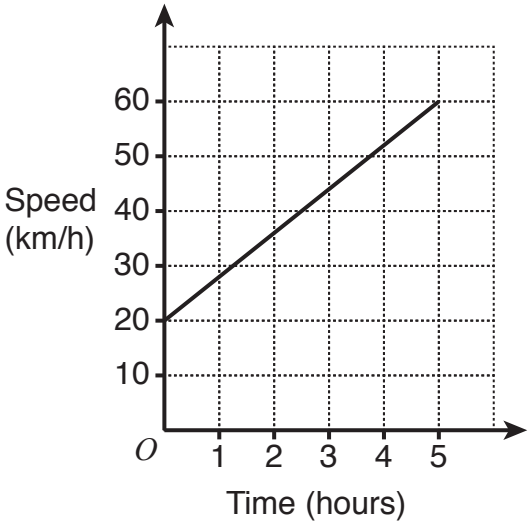
1 Here is the speed-time graph for a car.



Calculate the distance travelled during 5 hours.

Answer _____ km

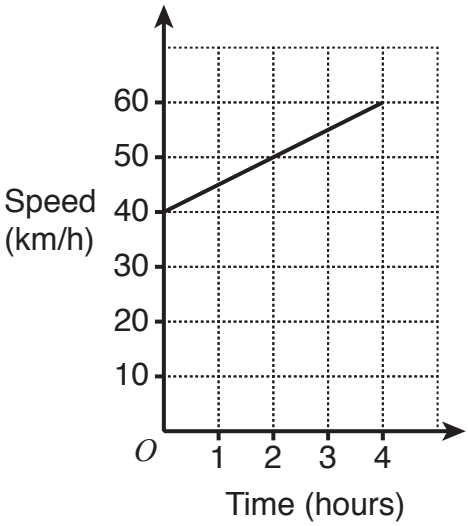
2 Here is the speed-time graph for a car.



Calculate the distance travelled during 5 hours.

Answer _____ km

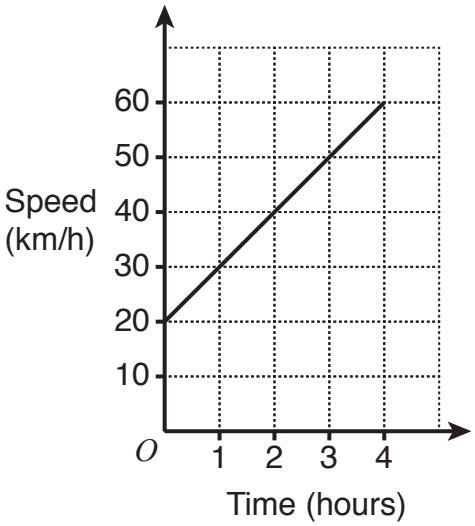
3 Here is the speed-time graph for a car.



Calculate the distance travelled during 4 hours.

Answer _____ km

4 Here is the speed-time graph for a car.



Calculate the distance travelled during 5 hours.

Answer _____ km

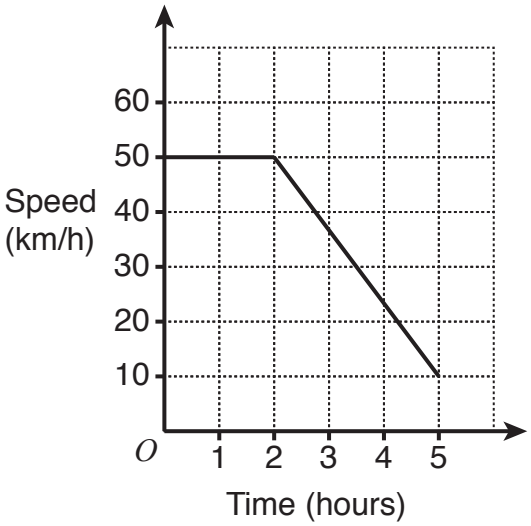
Area under a graph 4

H

*

The area under a speed-time graph gives the distance travelled.

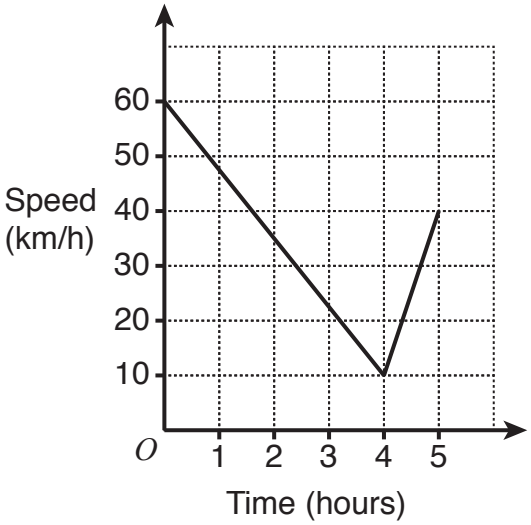
1 Here is the speed-time graph for a car.



Calculate the distance travelled during 5 hours.

Answer _____ km

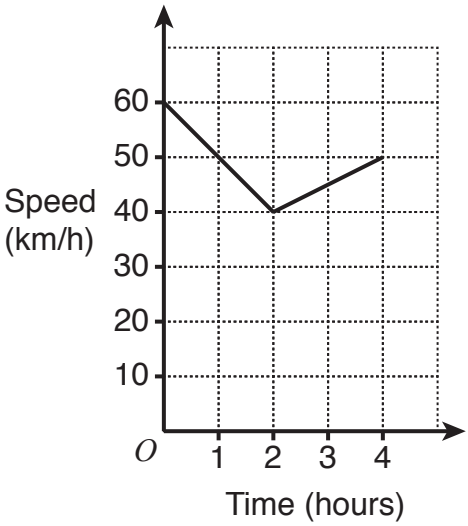
2 Here is the speed-time graph for a car.



Calculate the distance travelled during 5 hours.

Answer _____ km

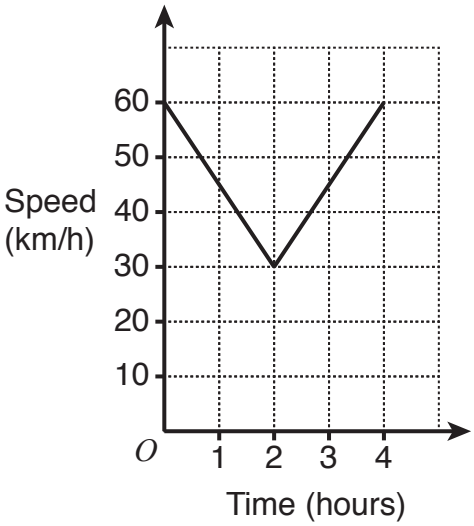
3 Here is the speed-time graph for a car.



Calculate the distance travelled during 4 hours.

Answer _____ km

4 Here is the speed-time graph for a car.



Calculate the distance travelled during 5 hours.

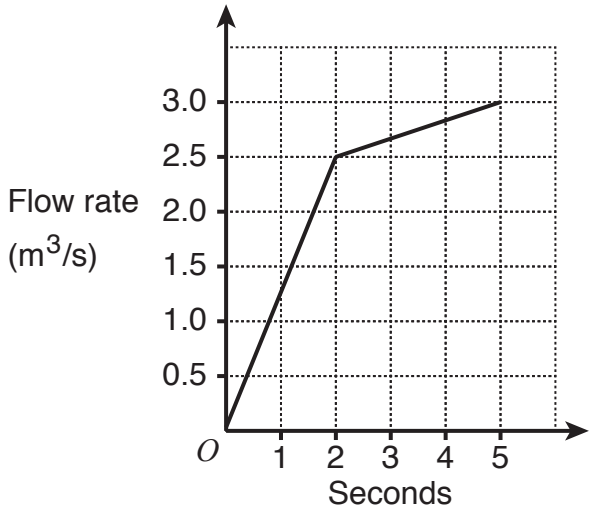
Answer _____ km

Area under a graph 5

H

*

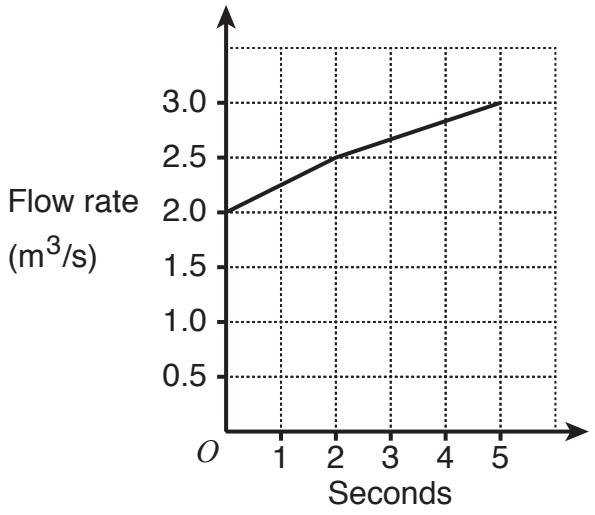
1 The flow-rate of a river past a point is measured. The graph shows the results.



Calculate the volume of water passing the point in these 5 seconds.

Answer _____ m3

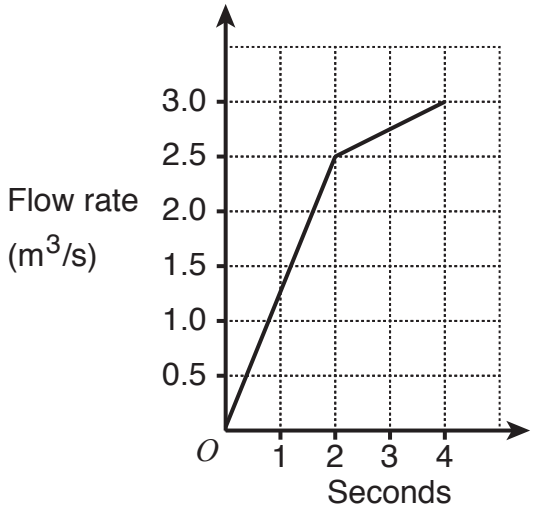
2 The flow-rate of a river past a point is measured. The graph shows the results.



Calculate the volume of water passing the point in these 5 seconds.

Answer _____ m3

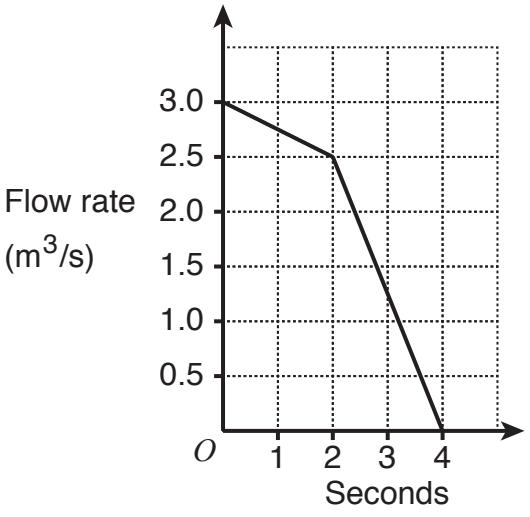
3 The flow-rate of a river past a point is measured. The graph shows the results.



Calculate the volume of water passing the point in these 4 seconds.

Answer _____ m3

4 The flow-rate of a river past a point is measured. The graph shows the results.



Calculate the volume of water passing the point in these 4 seconds.

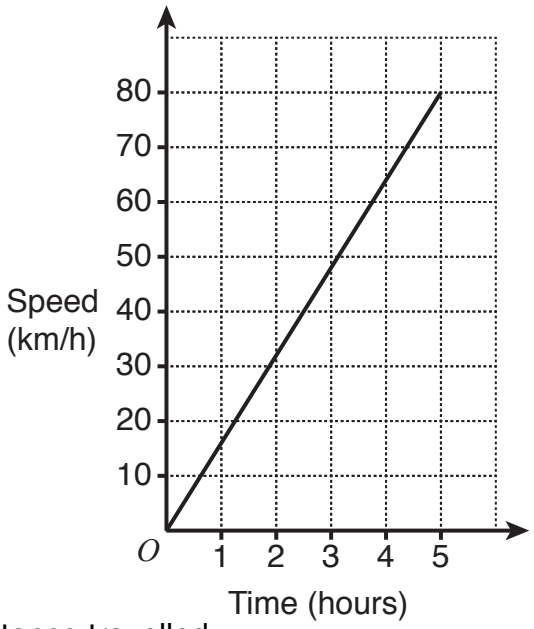
Answer _____ m3

Area under a graph: Test

H

*

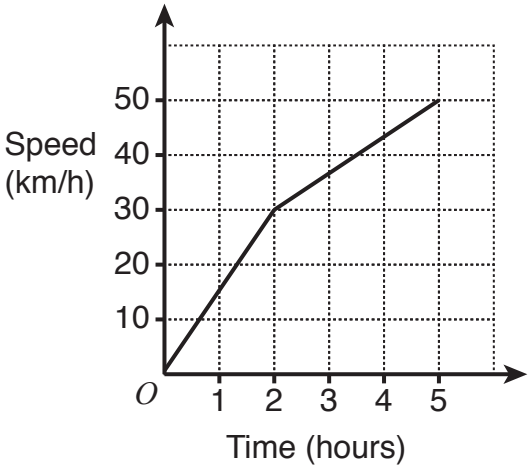
1 Here is the speed-time graph for a car.



Calculate the distance travelled during 5 hours.

Answer _____ km

2 Here is the speed-time graph for a car.



Calculate the distance travelled during 5 hours.

Answer _____ km

Area under a graph : Answers

H

*

Area under a graph 1

1 18 cm^2

2 9 cm^2

3 9 cm^2

4 10.5 cm^2

5 14 cm^2

6 $\frac{(a+b)}{2} \times h$

Area under a graph 2

1 $5 \times 50 = 250$ km

2 $5 \times 40 = 200$ km

3 $(5 \times 50) \div 2 = 125$ km

4 $(5 \times 40) \div 2 = 100$ km

Area under a graph 3

1 $\frac{40+60}{2} \times 5 = 250$ km

2 $\frac{20+60}{2} \times 5 = 200$ km

3 $\frac{60+40}{2} \times 4 = 200$ km

4 $\frac{20+60}{2} \times 4 = 160$ km

Area under a graph 4

1 $2 \times 50 = 100$ km

$\frac{50+10}{2} \times 3 = 90$ km

$100 + 90 = 190$ km

2 $\frac{60+10}{2} \times 4 = 140$ km

$\frac{10+40}{2} \times 1 = 25$ km

$140 + 25 = 165$ km

3 $\frac{60+40}{2} \times 2 = 100$ km

$\frac{40+50}{2} \times 2 = 90$ km

$100 + 90 = 190$ km

4 $\frac{60+30}{2} \times 2 = 90$ km

$\frac{30+60}{2} \times 2 = 90$ km

$90 + 90 = 180$ km

Area under a graph 5

1 $\frac{2 \times 2.5}{2} = 2.5$ m^3

$\frac{2.5+3}{2} \times 3 = 8.25$ m^3

$8.25 + 2.5 = 10.75$ m^3

2 $\frac{2 \times 2.5}{2} \times 2 = 5$ m^3

$\frac{2.5+3}{2} \times 3 = 8.25$ m^3

$5 + 8.25 = 13.25$ m^3

3 $\frac{2.5 \times 2}{2} = 2.5$ m^3

$\frac{2.5+3}{2} \times 2 = 5.5$ m^3

$2.5 + 5.5 = 8$ m^3

4 $\frac{3+2.5}{2} \times 2 = 5.5$ m^3

$\frac{2.5 \times 2}{2} = 2.5$ m^3

$5.5 + 2.5 = 8$ m^3

Area under a graph : Answers

H

*

Area under a graph : Test

1 $(5 \times 80) \div 2 = 200$ km

2 $\frac{2 \times 30}{2} = 30$km

$\frac{30 + 50}{2} \times 3 = 120$ km

$30 + 120 = 150$ km