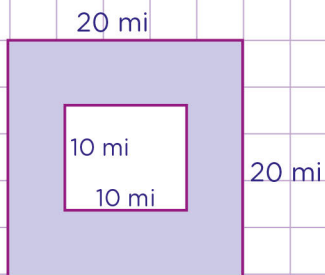
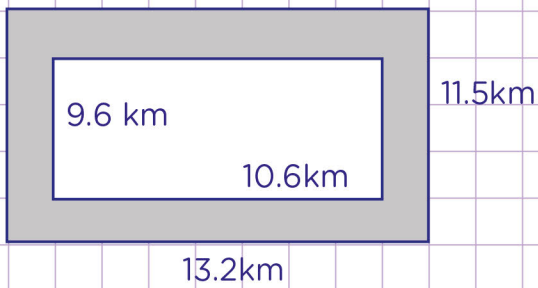
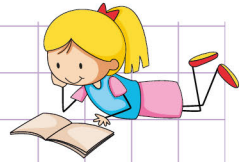


Name: Class:

Area between two rectangles

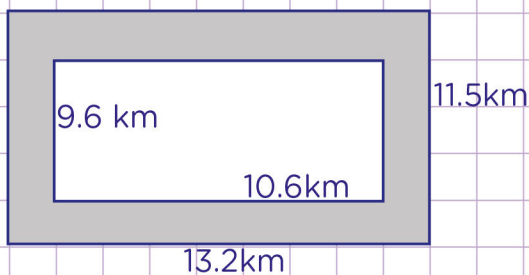
What is the area of the shaded region of the figures below ?



Name: Class:

Area between two rectangles

What is the area of the shaded region of the figures below ?



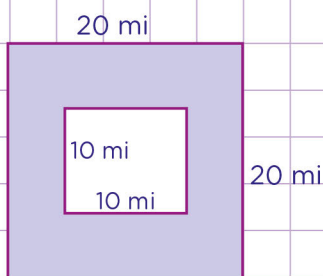
To calculate the area of the shaded region,
Subtract the area of the inner shape from
the area of the outer shape.

$$\begin{aligned}\text{Area of inner rectangle} &= L \times W \\ L &= 10.6 \text{ km} \\ W &= 9.6 \text{ km} \\ \text{Area} &= 10.6 \text{ km} \times 9.6 \text{ km} \\ &= 101.76 \text{ km}^2\end{aligned}$$

$$\begin{aligned}\text{Area of outer rectangle} &= L \times W \\ L &= 13.2 \text{ km} \\ W &= 11.5 \text{ km} \\ \text{Area} &= 13.2 \text{ km} \times 11.5 \text{ km} \\ &= 151.8 \text{ km}^2\end{aligned}$$

$$\begin{aligned}\text{So, area of shaded region is} \\ 151.8 \text{ km}^2 - 101.76 \text{ km}^2 \\ 50.04 \text{ km}^2\end{aligned}$$

So, the area of the shaded region is 50.04 km²



To calculate the area of the shaded region,
Subtract the area of the inner shape from
the area of the outer shape.

$$\begin{aligned}\text{Area of inner rectangle} &= L \times W \\ L &= 10 \text{ mi} \\ W &= 10 \text{ mi} \\ \text{Area} &= 10 \text{ mi} \times 10 \text{ mi} \\ &= 100 \text{ mi}^2\end{aligned}$$

$$\begin{aligned}\text{Area of outer rectangle} &= L \times W \\ L &= 20 \text{ mi} \\ W &= 20 \text{ mi} \\ \text{Area} &= 20 \text{ mi} \times 20 \text{ mi} \\ &= 400 \text{ mi}^2\end{aligned}$$

$$\begin{aligned}\text{So, area of shaded region is} \\ 400 \text{ mi}^2 - 100 \text{ mi}^2 \\ 300 \text{ mi}^2\end{aligned}$$

So, the area of the shaded region is 300 mi²

