

# Firefighter Maths

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Being a firefighter isn't just about putting out fires. If you're a firefighter you need to be good at maths too. Can you work out the answers to the following questions?



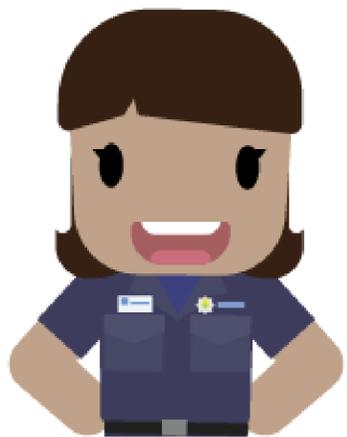
Firefighter Matt is the driver of the fire engine today. He has just checked that all of the hoses are on the engine and ready for any fires that might need to be put out.

There are 5 hoses on each side of the fire engine. Each hose is 20 metres long. Wow, that's a lot of hose!



**If you connected all the hoses together, how far in metres would they stretch?**

\_\_\_\_\_metres



Firefighter Jenny is checking the ladders. The big ladder on the top can stretch to 13.5 metres. That's really high! There is also another smaller ladder which can reach to 9 metres.

**In metres, how much further can the big ladder reach compared to the small ladder?**

\_\_\_\_\_metres

Firefighter Tom is checking the Breathing Apparatus cylinders. Each cylinder is full of compressed air, which the firefighters use to help them breathe when they go into a fire. There are 4 cylinders in the back of the fire engine and each one contains 300 bar of compressed air.

**How much bar of compressed air is there in total?**

\_\_\_\_\_bar



The 300 bar of air in each cylinder will last about 30 minutes when used in a fire.

**How many minutes will all four cylinders last?**

\_\_\_\_\_minutes



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Now all the equipment has been checked the firefighters are ready for the day. \*ring ring\* The first call of the day! They've been called to a bin on fire. The fire engine travels at 60 miles per hour to the fire which is 10 miles away.

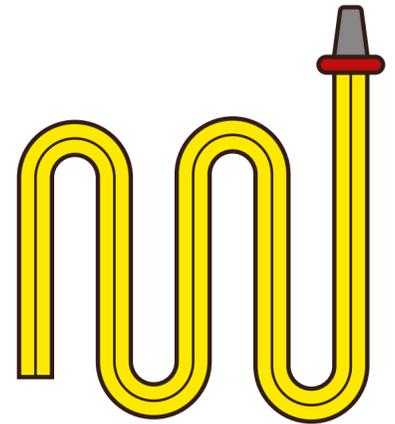
**How long will it take to get to the fire?**

-----minutes

The fire engine has found the fire, but can't get very close to it. It's had to park 60 metres away.

**Remembering that each hose is 20 metres in length, how many hoses will the firefighters need to reach the fire?**

-----hoses

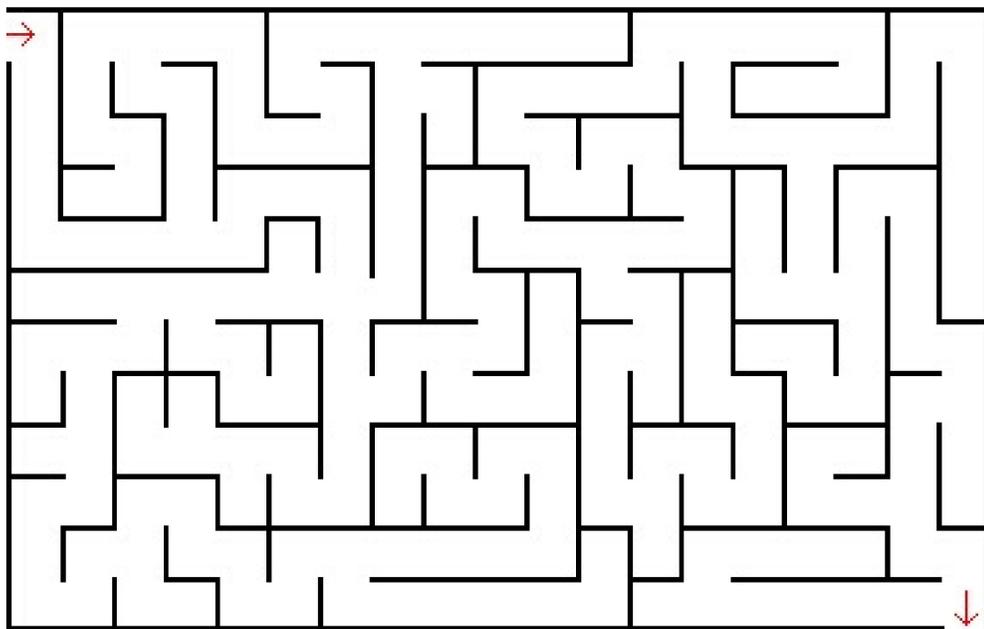


The next call of the day is to rescue a little boy stuck 1 metre from the top of an 8 metre tall tree.

**If firefighter Jenny uses the 9 metre ladder, how far up the ladder will she need to climb to rescue the little boy?**

The last call of the day is to a fire in a large factory.

This is going to be really tricky. Can you help firefighter Jenny and firefighter Tom get through the factory back to the fire engine?



**What a busy day we've had! Thank you for all your help, we couldn't have done it without you!  
Now that we've finished, we can check our smoke alarms are working at home. Ask a grown up to help you push the button!**



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