

Name

Date



## FOX VS RABBIT CHALLENGE 2

A fox called Fred spots a rabbit sitting happily nibbling grass 18 meters away. At the same moment, the rabbit (called Roger) notices the Fox.

The fox chases the rabbit who runs in a straight line away from him.

Fred can run at  $5 \frac{1}{2}$  meters a second.

Roger can run at  $3 \frac{1}{2}$  meters a second.



- How long will it take the fox to catch up with the rabbit?
- *Make sure you have evidence to back this up!*



Roger's rabbit hole is 35 meters away from him when he spots the fox.

- Will he be able to get into his hole before Fred catches him?
- *Explain how you know.*



Free Math sheets, Math games and Math help

MATH-SALAMANDERS.COM



## FOX VS RABBIT CHALLENGE 2 ANSWERS

A fox called Fred spots a rabbit sitting happily nibbling grass 18 meters away. At the same moment, the rabbit (called Roger) notices the Fox.

The fox chases the rabbit who runs in a straight line away from him.

Fred can run at  $5 \frac{1}{2}$  meters a second.

Roger can run at  $3 \frac{1}{2}$  meters a second.



- How long will it take the fox to catch up with the rabbit?
- *Make sure you have evidence to back this up!*

Time (seconds)	0	1	2	3	4	5	6	7	8	9	10	11
Fred Distance (m)	0	5.5	11	16.5	22	27.5	33	38.5	44	49.5	55	60.5
Roger Distance (m)	18	21.5	25	28.5	32	35.5	39	42.5	46	49.5	53	56.5

It will take Fred 9 seconds to catch up with Roger.

Roger's rabbit hole is 35 metres away from him when he spots the fox.

- Will he be able to get into his hole before Fred catches him?
- *Explain how you know.*

If the hole is 35m away from him, then it is a total distance of 53m away from the fox. Roger will reach 53m in 10 seconds. By this time, Fred will have run 55m and overtaken him, so Roger will have been caught!