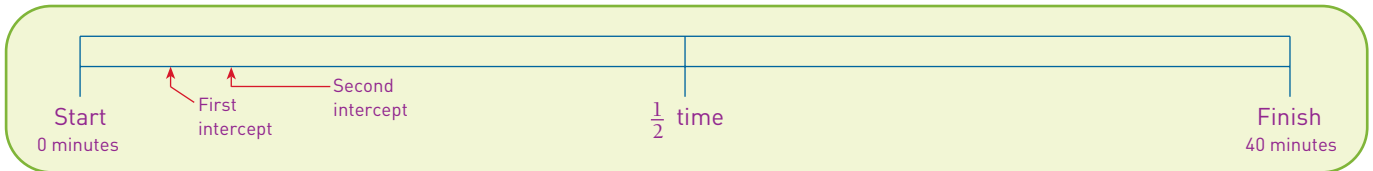# Sporting Fractions

Activity

1. Jackie is collecting data on intercepts in a game of netball. She decides to use her fraction knowledge to mark the time of the intercepts on a timeline. Here is Jackie's timeline 5 minutes into a netball game:

First intercept

Second intercept

Start
0 minutes

$\frac{1}{2}$ time

Finish
40 minutes

a. Copy the timeline and include $\frac{1}{4}$ and $\frac{3}{4}$ time. Show how many minutes have passed at each of those stages and at $\frac{1}{2}$ time.

b. How many minutes into the game were the first and second intercepts made?

c. Other intercepts were made after:

i. 19 minutes   **ii.** 31 minutes   **iii.** 35 minutes.

Mark these on your timeline. Approximately what fraction of the game had been completed when each of these three intercepts occurred?
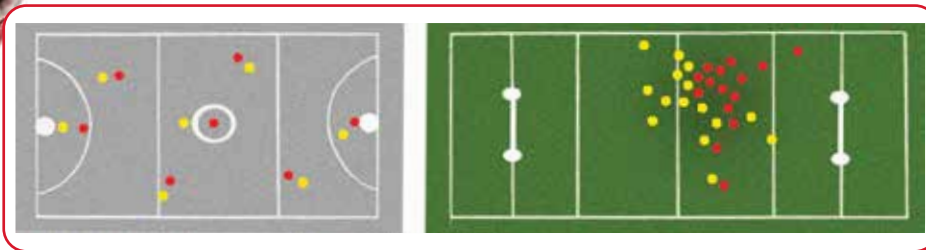
2. A rugby game is 80 minutes long.

a. Copy and complete the rugby timeline. Mark the fraction of the game and the minutes passed for $\frac{1}{2}, \frac{1}{4}, \frac{3}{4}, \frac{1}{8}, \frac{5}{8}$, and $\frac{1}{5}$ time.

Start
0 minutes

$\frac{1}{2}$ time

Finish
80 minutes
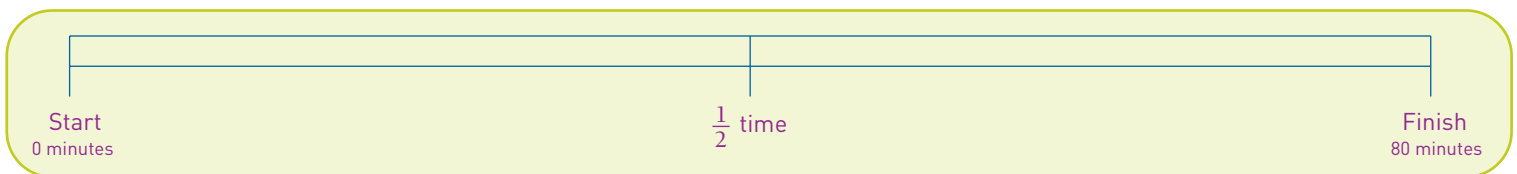
b. What fraction of the game has been played when there are 10 minutes to go?

c. Tries were scored in the following minutes of play:

i. 10th minute   **ii.** 38th minute
iii. 62nd minute   **iv.** 75th minute.

Mark these times on the timeline. Approximately what fraction of the game had been played when each try was scored?

Solving problems involving fractions of time and distance
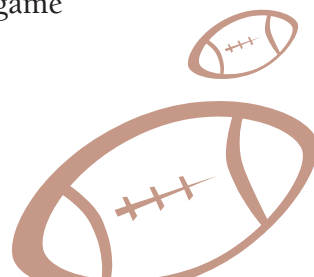
3. Philip is doing a 5 kilometre fun run. Copy the timeline, mark each kilometre, and fill in what his time should be at each kilometre mark if he runs at the same speed the whole way and does the run in 30 minutes.

Start
0 kilometres
0 minutes

Finish
5 kilometres
30 minutes
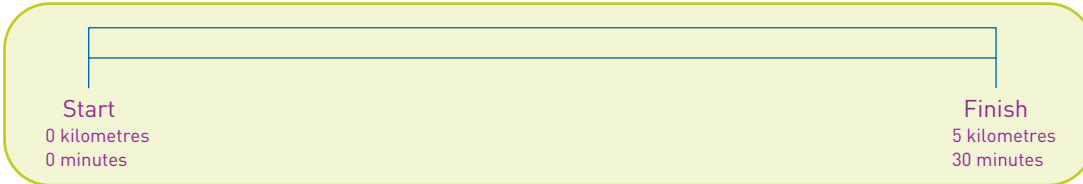
4. Natalie's maths group is trying to work out what fraction should go in the missing space on the number line.

0 □ $\frac{1}{5}$
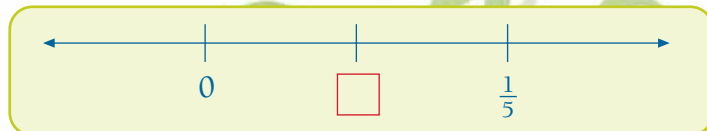
What comes halfway between 0 and $\frac{1}{5}$?

It's $\frac{1}{10}$.

What about $\frac{10}{50}$?

It must be $\frac{2}{5}$!

No, I think it's $\frac{5}{50}$.

What fraction do you think should go in the box? Explain your answer.