

Life Skill Mathematics – Worksheet 2

Mathematics in Sports

Success rate in Netball

$$\text{success rate} = \frac{\text{Number of goals scored}}{\text{Number of attempts}} \times 100$$

| Name | Goals | Attempts | Success rate |
|------|-------|----------|--------------|
| Anna | 17 | 24 | |
| Mary | 30 | 35 | |
| Tina | 45 | 48 | |
| Kama | 18 | 24 | |

Which player has the highest success rate?

In a netball game Jana scored 7 goals from 13 shots and Nina scored 12 goals from 17 shots. Who has the better success rate? By how much?

Goal average

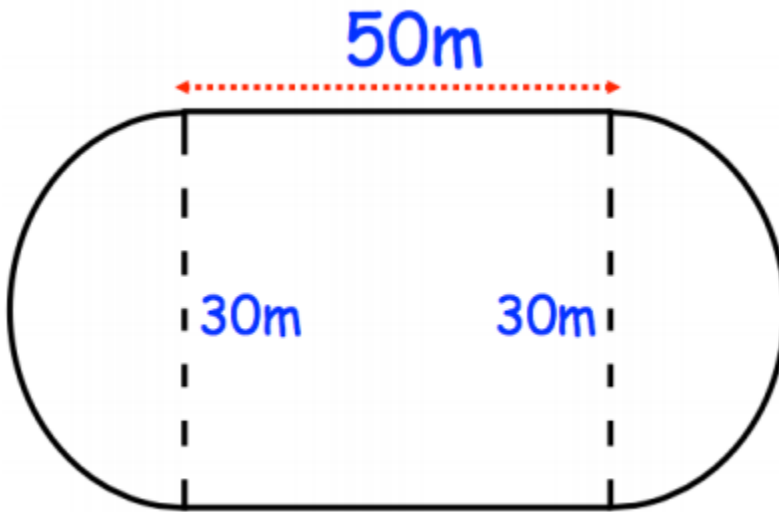
$$\text{Goal average} = \frac{\text{Number of goals scored}}{\text{Number of matches}}$$

| Name | Goals | Matches | Goal Average |
|-------|-------|---------|--------------|
| Kata | 1299 | 306 | |
| Jasa | 1256 | 253 | |
| Tony | 1252 | 268 | |
| Ablet | 1030 | 248 | |

Which player has the highest goal average?

Perimeter

A primary school has a running track. It has two straights of 50 metres. Also there are two 'bends' that are semicircles with diameter 30 metres.



Work out the distance around the running track.

Sporting Costs

1. A jet ski costs \$40 to hire for a period of 30 minutes

Calculate the cost of hiring a jet ski for

- a. 1 hour
- b. 2 hours and 15 minutes

2.

| Uniform Prices | |
|----------------|------|
| Shorts | \$11 |
| jersey | \$15 |
| boot | \$70 |
| socks | \$15 |
| Shim pad | \$12 |

- a. In order to join a soccer club each player needs uniform consisting of shorts, soccer jersey, boot, socks, Shim pad. Calculate the cost of uniform per player.
- b. The soccer team consists of 18 players who have managed to raise a total of \$500. If the team decides to use this money to reduce the cost of purchasing the uniforms, what will be the cost of purchasing the uniforms per player?
- c. Express the savings as percentage of the original cost

3. Gym charges are shown below:

6 months membership costs \$175
12 months membership costs \$315
Monthly \$30

- a. Is it cheaper to join Gym every 6 months or on a 12 monthly basis?
- b. The Gym offers 20% off its 12 month membership.
Calculate the special price

Speed

1. A swimmer completed 250m in 5 minutes and 40 seconds. Calculate his average speed.
2. In a 100m sprint, the following competitors had their times recorded as indicated

| Name | Time(s) |
|------|---------|
| Kata | 13.56 |
| Jasa | 15.82 |

| | |
|-------|-------|
| Tony | 15.09 |
| Ablet | 11.63 |

- a. Arrange the competitors in order from first to fourth.
 - b. Calculate Kata's speed in m/s.
3. Rajen needs to run 1000m in 2min 15s.
- a. If he runs the first 400m in 50s, what time will he have to run in the last 600m?
 - b. Calculate the speed at which he should run in the last 600m.