## Arithmetic

1. $\frac{4}{9} \times \frac{1}{3}$
2. $5-2.46$
3. $0.2 \times 30$
4. $1 \frac{1}{5} \times 3$

## Practice: Miles and Kilometres

5. Recap: Explain what the $\approx$ symbol means.
6. What are the missing numbers?
a. 5 miles $\approx$ ? kilometres
b. 8 kilometres $\approx$ ? miles
7. What are the missing numbers?
a. 1 mile $\approx ? \mathrm{~km}$
b. $1 \mathrm{~km} \approx$ ? miles
8. Convert to km.
a. 50 miles
b. 15 miles
c. 25 miles
9. Put in ascending order of size.

$$
1 \text { mile } \quad 1 \mathrm{~km} \quad \frac{1}{2} \text { mile }
$$

13. If 5 miles $\approx 8$ kilometres then 15 miles $\approx$ 18 kilometres.

Is this correct?
8. Convert to miles.
a. 4 km
b. 16 km
c. 80 km
10. Explain how to convert 10 miles to kilometers.
12. Put in descending order of size.

$$
3 \mathrm{~km} \quad 2 \text { miles } \quad 2 \mathrm{~km}
$$

14. 5 children were raising money by running each day.

Myron ran 6 miles
Aston ran 2.5 miles
Raihan ran 8 km
Osama ran 4.8 km
Huxley ran 4 miles
Calculate the total distance they ran in:
a. miles
b. kilometres

## Answers

| Q no. | Question | Answer |
| :---: | :---: | :---: |
| 1 | $\frac{4}{9} \times \frac{1}{3}$ | $\frac{4}{27}$ |
| 2 | 5-2.46 | 2.54 |
| 3 | $0.2 \times 30$ | 6 |
| 4 | $1 \frac{1}{5} \times 3$ | $\frac{18}{5} \text { or } 3 \frac{3}{5}$ |
| 5 | Explain what the $\approx$ symbol means. | The $\approx$ symbol means roughly equal to or approximately equal to. |
| 6 | What are the missing numbers? | a. 8, b. 5 |
| 7 | What are the missing numbers? | a. 1.6, b. $\frac{5}{8}$ or 0.625 |
| 8 | Convert to miles. | a. 2.5, b. 10, c. 50 |
| 9 | Convert to km. | a. 80, b. 24, c. 40 |
| 10 | Explain how to convert 10 miles to kilometers. | As 5 miles $\approx 8$ kilometres, 10 miles would be $\approx 16$ kilometers. To work this out, pupils need to be able to see the relationship between 5 miles and 10 miles ( 10 is double 5) and apply this to the kilometres (by also doubling them). |
| 11 | Put in ascending order of size. | $\frac{1}{2}$ mile, $1 \mathrm{~km}, 1$ mile |
| 12 | Put in descending order of size. | 2 miles, $3 \mathrm{~km}, 2 \mathrm{~km}$ |
| 13 | If 5 miles $\approx 8$ kilometres then 15 miles $\approx 18$ kilometres. Is this correct? | This is incorrect. Instead of understanding that 5 miles has been multiplied by 3 to make 15 miles, the assumption has been made that 10 miles have been added. This had led to the understanding that 10 should be added to both sides. <br> The correct answer is 15 miles $\approx 24$ kilometres |
| 14 | Calculate the total distance they ran in: <br> a. miles <br> b. kilometres | Myron - 6 miles or 9.6 km Aston - 2.5 miles or 4 km Raihan - 5 miles or 8 km Osama - 3 miles or 4.8 km Huxley - 4 miles or 6.4 km <br> a. 20.5 miles <br> b. 32.8 km |

