1) () The distance from London to Birmingham.The length of a football pitch.The length of the Amazon river.The length of your school field.
2) a)

| Miles | Kilometres |
| :---: | :---: |
| 10 | 16 |
| 15 | 24 |
| 30 | 48 |
| 100 | 160 |
| 1 | 1.6 |

b)

| Kilometres | Miles |
| :---: | :---: |
| 32 | 20 |
| 64 | 40 |
| 400 | 250 |
| 192 | 120 |
| 7.2 | 4.5 |

1) a) This is always true as 1 mile $\approx 1.6 \mathrm{~km}$.
b) This is never true. I can use miles or kilometres to record any distance. The reason I might choose to use miles or kilometres would probably depend on where I lived. UK for example uses miles to describe distances whereas most of Europe uses kilometres.
c) This is always true as $12 \mathrm{~km} \approx 7 \frac{1}{2}$ miles.
2) Alice is not correct as she has used = instead of $\approx$. Freya is correct as $24 \mathrm{~km} \approx 15$ miles.
Harry is not correct as he has just doubled the number of miles to estimate the number of kilometres.
3) a) Team Roadracer:

Rod: $960 \mathrm{~km} \approx 600$ miles Rachel: $1120 \mathrm{~km} \approx 700$ miles Ruaridh: $2080 \mathrm{~km} \approx 1300$ miles

Team Tornado:
Tod: 790 miles $\approx 1264 \mathrm{~km}$
Trish: 1055 miles $\approx 1688 \mathrm{~km}$
Tori: 1245 miles $\approx 1992 \mathrm{~km}$
b) 2600 miles
c) Team Roadracer has driven 4160 km .

Team Tornado has driven approximately 4944 km which is approximately 784 km more.
d) $4160 \mathrm{~km} \div 4=1040 \mathrm{~km}$
$\frac{1}{5}$ of the race $=1040 \mathrm{~km}$
$1040 \mathrm{~km} \times 5=5200 \mathrm{~km}$
$\frac{5}{5}$ or 1 whole race $=5200 \mathrm{~km}$
2) a) The entire race is approximately 5200 km .
b) Team Warmwheels had 3400 km left to drive ( $5200 \mathrm{~km}-1800 \mathrm{~km}$ )
c) Day Ito 3: $5200 \mathrm{~km}-1800 \mathrm{~km}=3400 \mathrm{~km}$

Day 4: $3400 \mathrm{~km}-600 \mathrm{~km}=2800 \mathrm{~km}$
Day 5: $2800 \mathrm{~km}-640 \mathrm{~km}=2160 \mathrm{~km}$
Day 6: $2160 \mathrm{~km}-680 \mathrm{~km}=1480 \mathrm{~km}$
Day 7: $1480 \mathrm{~km}-720 \mathrm{~km}=760 \mathrm{~km}$
Day 8: $760 \mathrm{~km}-760 \mathrm{~km}=0 \mathrm{~km}$ left to race
It took Team Warmwheels 8 days to complete the entire race.

