

Solutions

Award method and answer marks as indicated; accept equivalent correct methods.

2.1

- Left to right on the number line: $-7, -3, 0, 2$.

2.2

- $3/5 = 0.60$, so $3/5 < 0.62$.

2.3

- Convert to decimals 0.48, 0.45, 0.50: 45%, 0.48, $1/2$.

2.4

- Include -2 but exclude 3: $-2, -1, 0, 1, 2$.

3.1

(a)

- Smaller time is faster: **12.08 s, 12.18 s, 12.8 s**.

(b)

- At most includes the boundary: $t \leq 12.18$ (time in seconds).

(c)

- **The 12.08 s and 12.18 s runners qualify**; $\leq$ includes the exact limit.

3.2

(a)

- Use equal decimal places to compare.
- Coldest to warmest: **$-2.5, -2.15, -2.05, -2.005$ °C**.
- The warmest is **-2.005 °C**, nearest to zero.

(b)

- Accept **$-2.5, -2.15$ and -2.05 °C**.
- Reject **-2.005 °C**, which is greater than -2.05 °C.
- The lower endpoint -2.5 °C is included because the symbol is $\leq$.