

Mark schemes

Q1.

50%

B1

[1]

Q2.

Alternative method 1

(LQ =) 10 and (UQ =) 33 and answer 23

B3 (LQ =) 10 and (UQ =) 33

B2 (LQ =) 10 or (UQ =) 33

B1 Any two correct frequencies from 8, 8, 12 and 20

B4

Alternative method 2

(LQ =) 10.3125 and (UQ =) 33.75 and answer 23.4375

B3 (LQ =) 10.3125 and (UQ =) 33.75

B2 (LQ =) 10.3125 or (UQ =) 33.75

B1 Any two correct frequencies from 8, 8, 12 and 20

B4

Additional Guidance

Alt 2 is using $\frac{48+1}{4} = 12.25$ and $\frac{3(48+1)}{4} = 36.75$ to work out quartiles

Correct frequencies must be for the correct bar

33.75 may come from $\frac{3}{4} \times 45$

B0

Allow B1 for two correct frequencies even if not subsequently used

B1

Frequency of 8 seen once with no other correct frequencies counts as one correct

Frequency of 8 seen twice counts as two correct

B1

36 – 12 = 24 or 36.75 – 12.25 = 24.5 with < 2 correct frequencies

B0

Answer 23 with neither quartile correct and < 2 correct frequencies

B0

10-33 and 23

B4

10-33

B3

Do not allow dashes or vertical lines at 10 and / or 33 to imply correct quartiles

[4]

Q3.

(a) [64, 66]

B1

(b) [53, 55]

B1

[2]