| | | | | | |
|---|---|---|---|---|---|
| **18** (a) | $(0.7 \times 10) + (3.4 \times 5) + (1 \times 9) + (2.5 \times 6) + (4.8 \times 15)$<br>$= 7 + 17 + 9 + 15 + 72 (= 120)$<br><br>no. of sml squares =<br>$(10 \times 7) + (5 \times 34) + (9 \times 10) + (6 \times 25) + (15 \times 48)$<br>$= 70 + 170 + 90 + 150 + 720 (= 1200)$<br><br>**or** all correct values in bars oe not added | | 3 | M1 | for a correct method to work out the total area eg total frequency or number of small squares or other correct method (allow one error in method) [count use of 25 for 24 as one error]<br>**or** all correct values in bars oe not added |
| | $(1 \times 7) + (2.5 \times 6) + (5 \times 4.8) = 7 + 15 + 24 (= 46)$<br>or<br>no. of sml squares<br>$(48 \times 5) + (6 \times 25) + (7 \times 10) = 240 + 150 + 70 (=460)$ | | | M1 | for a correct method to work out the area between 17 minutes and 35 minutes<br>eg using frequency density or number of small squares oe |
| | $\frac{46}{120}$ | $\frac{46}{120}$ | | A1 | for $\frac{46}{120}$ oe (allow 2 dp or better 0.3833... or 38% or better) |
| (b) | | | 2 | M1 | for $\frac{n}{15}$ where $n < 15$ or $\frac{q}{720}$ where $q < 720$ or<br>$\frac{r}{72}$ where r < 72 or<br>$\frac{9}{m}$ where $m > 9$ or $\frac{432}{p}$ where $p > 432$<br>$\frac{43.2}{t}$ where $t > 43.2$ |
| | | $\frac{9}{15}$ | | A1 | $\frac{9}{15}$ oe |
| | | | | | ***Total 5 marks*** |