

| Question | Answer | Mark | Mark scheme | Additional guidance |
|----------|--------|---|---|--|
| 17 | 7200 | <p>M1</p> <p>M1</p> <p>M1</p> <p>M1</p> <p>A1</p> | <p>for start of method to find the volume, eg $16 \times 12 \times 18 (= 3456)$ or $16 \times 8 \times 18 (= 2304)$ or $10 \times 8 \times 18 (= 1440)$ or $(16 + 10) \times (12 + 8) \times 18 (= 9360)$ or $12 \times 10 \times 18 (= 2160)$</p> <p>or</p> <p>for start of method to find the area of cross section, eg $16 \times 12 (= 192)$ or $(10 + 16) \times 8 (= 208)$ or $16 \times (12 + 8) (= 320)$ or $8 \times 10 = (80)$ or $(16 + 10) \times (12 + 8) (= 520)$ or $12 \times 10 = (120)$</p> <p>for methods to find at least two volumes, eg two of $16 \times 12 \times 18 (= 3456)$ $16 \times 8 \times 18 (= 2304)$ $10 \times 8 \times 18 (= 1440)$</p> <p>or $(16 + 10) \times (12 + 8) \times 18 (= 9360)$ and $12 \times 10 \times 18 (= 2160)$</p> <p>or for a complete method to find the area of cross section, eg “192” + “208” (= 400) or “320” + “80” (= 400) or “520” – “120” (= 400)</p> <p>for a complete method to find the volume, eg “3456” + “2304” + “1440” oe or “5760” + “1440” or “3456” + “3744” or “9360” – “2160” or “400” $\times 18$ oe</p> <p>cao</p> | <p>Any correct method to find a volume which can lead to the total volume is acceptable.</p> <p>Any correct method to find an area which can lead to the area of cross section is acceptable.</p> <p>Award M2 for $16 \times (12 + 8) \times 18 (= 5760)$ or $(16 + 10) \times 8 \times 18 (= 3744)$ or $(16 \times 12 + 10 \times 8) \times 18 (= 4896)$</p> |