

## Rounding & Estimating: Medium Practice Paper 4 Answers

Q#	Answer	Explanation
1	D	To round to 2 decimal places, look at the 3rd decimal digit (7). Since $7 \geq 5$ , we round up. $12.347 \rightarrow 12.35$ seconds.
2	B	2,451: the tens digit is 5 ( $\geq 5$ ), so it rounds up to 2,500. The others round to 2,400 (2,449) or 2,600 (2,550, 2,551, 2,600).
3	D	To round to the nearest pound, look at the first decimal digit (6). Since $6 \geq 5$ , we round up. $\pounds 1,847.65 \rightarrow \pounds 1,848$ .
4	C	42.8 rounds to 43 and 5.1 rounds to 5. $43 \times 5 = 215$ . (The exact answer is 218.28, but the estimate is 215.)
5	D	To round to 2 decimal places, look at the 3rd decimal digit (5). Since $5 \geq 5$ , we round up. $0.785 \rightarrow 0.79$ kg.
6	D	The 2nd decimal digit is 7 ( $\geq 5$ ), so we round up the 1st decimal digit. The 1st decimal digit is 9; rounding up gives 10, which carries over: $99.9 \rightarrow 100.0$ .
7	A	To round to the nearest thousand, look at the hundreds digit (4). Since $4 < 5$ , we round down. $\pounds 23,499 \rightarrow \pounds 23,000$ .
8	D	$10^2 = 100$ , which is very close to 99. So $\sqrt{99} \approx \sqrt{100} = 10$ . (The exact value is 9.95, which rounds to 10.)
9	A	346 rounds down to 300 (tens digit $4 < 5$ ). $300 \times 8 = 2,400$ . (The exact answer is 2,768, but the estimate using the rounded value is 2,400.)
10	D	$3.8 \approx 4$ , $2.1 \approx 2$ , $1.9 \approx 2$ . Estimated volume = $4 \times 2 \times 2 = 16 \text{ m}^3$ . (The exact volume is $15.162 \text{ m}^3$ .)
11	C	To round to 2 decimal places, look at the 3rd decimal digit (9). Since $9 \geq 5$ , we round up the 2nd decimal digit: $9 \rightarrow 10$ , which carries over. $0.099 \rightarrow 0.10$ .

12	D	To round to nearest £100, look at the tens digit (7). Since $7 \geq 5$ , we round up. $\pounds 4,872 \rightarrow \pounds 4,900$ .
13	C	19.6 rounds to 20 and 4.2 rounds to 4. $20 \div 4 = 5$ . (The exact answer is approximately 4.67, but the estimate is 5.)
14	D	To round 98.7 to the nearest 10, look at the units digit (8). Since $8 \geq 5$ , we round up the tens digit: $9 \rightarrow 10$ , which carries over. $98.7 \rightarrow 100$ minutes.
15	A	To round to 1 decimal place, only look at the 2nd decimal digit (4). Since $4 < 5$ , we round down. $2.449 \rightarrow 2.4$ . Never cascade-round ( $2.449 \rightarrow 2.45 \rightarrow 2.5$ is incorrect).