

Rounding & Estimating: Medium Practice Paper 5 Answers

Q#	Answer	Explanation
1	C	To round to 1 decimal place, look at the 2nd decimal digit (7). Since $7 \geq 5$, we round up. $4.67 \rightarrow 4.7$.
2	B	The first two significant figures are 5 and 2. The next digit is 3, which is less than 5, so we round down. $52,300 \rightarrow 52,000$.
3	D	The first significant figure is 4. The next digit is 6, which is 5 or more, so we round up. $0.0463 \rightarrow 0.05$.
4	C	58 rounds to 60 and 41 rounds to 40. $60 \times 40 = 2,400$. (The exact answer is 2,378, but the estimate is 2,400.)
5	D	To round to 2 decimal places, look at the 3rd decimal digit (5). Since $5 \geq 5$, we round up the 2nd decimal digit. $9.955 \rightarrow 9.96$.
6	E	355 has a units digit of 5 (≥ 5), so it rounds up to 360, not 350. All others (345–354) round to 350.
7	B	To round to 2 decimal places, look at the 3rd decimal digit (2). Since $2 < 5$, we round down. $7.982 \rightarrow 7.98$.
8	D	4.8 rounds to 5 and £1.95 rounds to £2. $5 \times £2 = £10$. (The exact cost is £9.36, but the estimate is £10.)
9	B	The first two significant figures are 5 and 6. The next digit is 1, which is less than 5, so we round down. $0.00561 \rightarrow 0.0056$.
10	C	18.6 rounds to 19 and 12.3 rounds to 12. $19 \times 12 = 228 \text{ m}^2$. (The exact area is 228.78 m^2 , and our estimate is very close.)
11	B	2,543: the first significant figure is 2, and the next digit is 5 (≥ 5), so it rounds up to 3,000. The others round to 2,000 (2,499) or 4,000 (3,500, 3,501, 4,000).

12	C	To round to 2 decimal places, look at the 3rd decimal digit (5). Since $5 \geq 5$, we round up. $8.505 \rightarrow 8.51$.
13	D	0.48 rounds to 0.5 (1 s.f.) and 0.52 rounds to 0.5 (1 s.f.). $0.5 \times 0.5 = 0.25$. (The exact answer is 0.2496.)
14	E	3.705: the 3rd decimal digit is 5 (≥ 5), so it rounds up to 3.71, not 3.70. All others have a 3rd decimal digit less than 5, so they round down to 3.70.
15	D	2.9 rounds up to 3. $3^3 = 3 \times 3 \times 3 = 27$. (The exact value of 2.9^3 is 24.389, but the estimate is 27.)