Rounding & Estimating: Hard Practice Paper 7

Q1. A rectangle measures 6 cm by 4 cm, each side to the nearest centimetre. What is the smallest possible area?

A. 24 cm² *B.* 20 cm² *C.* 19.25 cm² *D.* 21 cm² *E.* 18 cm²

Q2. Each of 34 people pays £18.75. Estimate the total, and say how the estimate compares with the true amount.

A. About £700, which is below the true total

B. About £700, which is above the true total

C. About £500, which is above the true total

D. About £600, which is exactly right

E. About £400, which is below the true total

Q3. A number is 5.7 when rounded to 1 decimal place and 5.68 when rounded to 2 decimal places. Which of these could it be?

A. 5.686 *B.* 5.672 *C.* 5.678 *D.* 5.691 *E.* 5.669

Q4. Estimate the value of (39 × 21) ÷ 4.1.

A. About 400 *B.* About 100 *C.* About 200 *D.* About 20 *E.* About 800

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Q5. The table shows the mass of four parcels, each given to the nearest 100 g. Which parcel could weigh exactly 2,450 g?

Parcel	Mass
P	2 400 g
Q	2 500 g
R	2 300 g
S	2 600 g

A. Parcel Q

B. Parcel P

C. Parcel R

D. Parcel S

E. None of them

Q6. A country has 6.7 million people living in 2.1 million households. Estimate the mean number of people in a household.

A. About 30 *B.* About 4 *C.* About 2 *D.* About 3 *E.* About 14

Q7. A shelf is 90 cm long, measured to the nearest centimetre. Books are 3 cm wide, measured to the nearest millimetre. Can 30 of these books be certain to fit on the shelf?

A. Yes, because 30 × 3 = 90 exactly

B. No, because the books could take up 91.5 cm

C. Yes, because the shelf could be 90.5 cm

D. No, because the books need 93 cm

E. It cannot be decided

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Q8. Estimate 0.00612 × 41,000.

A. About 2.4

B. About 24

C. About 2,400

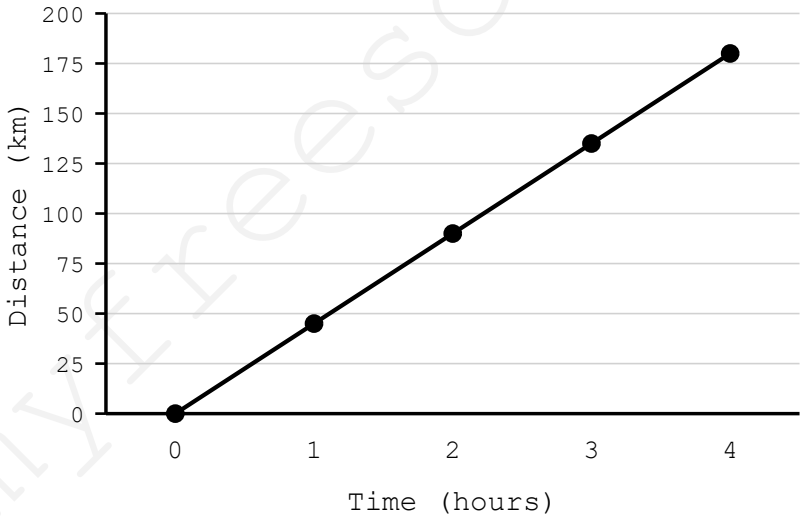
D. About 240

E. About 4,000

Q9. A whole number rounds to 400 to the nearest 100, and to 350 to the nearest 50. What is the largest it could be?

A. 374 *B.* 349 *C.* 374.9 *D.* 399 *E.* 424

Q10. The graph shows how far a car has travelled. Estimate the distance after 2.5 hours.



A. About 90 km

B. About 110 km

C. About 135 km

D. About 100 km

E. About 150 km

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Q11. Estimate three eighths of 795.

A. About 350 *B.* About 400 *C.* About 200 *D.* About 250 *E.* About 300

Q12. A length is given as 24 cm, measured to the nearest centimetre. Which statement is correct?

A. It is at least 23.9 cm and less than 24.1 cm

B. It is at least 24 cm and less than 25 cm

C. It is between 23 cm and 25 cm

D. It is at least 23.5 cm and less than 24.5 cm

E. It is exactly 24 cm

Q13. Which of these calculations has an answer closest to 500?

A. 51 × 9.8

B. 24.8 × 19.7

C. 98 × 4.9

D. 260 × 1.9

E. 71 × 6.9

Q14. Which is the best estimate of 5,940 ÷ 29?

A. 150 *B.* 20 *C.* 2,000 *D.* 300 *E.* 200

Q15. A number written to 2 significant figures is 6,300. What is the largest whole number it could be?

A. 6,304 *B.* 6,350 *C.* 6,399 *D.* 6,250 *E.* 6,349

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