Problem Solving & Word Problems: Hard Practice Paper 1

Q1. I think of a number, multiply it by 3, subtract 8 and then divide by 4. The answer is 7. What was my number?

A. 9 B. 10 C. 12 D. 14 E. 15

Q2. A field holds only chickens and rabbits. There are 35 heads and 94 feet altogether. How many rabbits are there?

A. 9 B. 12 C. 15 D. 20 E. 23

Q3. The mean of Maya's first five test scores is 72. What must she score in her sixth test to raise her mean to 75?

A. 78 B. 80 C. 85 D. 90 E. 95

Q4. Three shirts and two ties cost £96 altogether. A shirt costs £22. What is the cost of one tie?

A. £12 B. £15 C. £18 D. £20 E. £30

Q5. A television costs £250. Its price is increased by 20% and then reduced by 20% in a sale. What is the final price?

A. £200 B. £240 C. £250 D. £260 E. £300

Q6. Ann is 3 times as old as Bob. In 6 years' time she will be twice as old as Bob. How old is Ann now?

A. 6 B. 12 C. 15 D. 18 E. 24

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Q7. There are fewer than 30 eggs in a basket. Packed in boxes of 6 there are 4 left over, and packed in boxes of 8 there are 6 left over. How many eggs are there?

A. 16 B. 20 C. 22 D. 26 E. 28

Q8. Pens cost 45p and pencils cost 25p. Sam buys 8 items altogether and spends £2.80. How many pens does he buy?

A. 2 B. 3 C. 4 D. 5 E. 6

Q9. Six taps fill a tank in 40 minutes. How long would 8 taps take to fill the same tank?

A. 25 minutes

B. 30 minutes

C. 32 minutes

D. 35 minutes

E. 53 minutes

Q10. Ben spends one third of his money on a book and then one quarter of what is left on lunch. He has £18 left. How much did he start with?

A. £24 B. £30 C. £36 D. £42 E. £48

Q11. A rectangle has a perimeter of 34 cm and an area of 60 cm^2. What is the length of its longer side?

A. 10 cm B. 12 cm C. 15 cm D. 17 cm E. 20 cm

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Q12. A shop opens from 08:30 to 17:15 every day from Monday to Friday. How long is it open in a week?

A. 40 hours

B. 42 hours 30 minutes

C. 43 hours 45 minutes

D. 44 hours 15 minutes

E. 45 hours

Q13. £120 is shared between two people so that one receives £20 more than the other. How much does the person with the larger share receive?

A. £50 B. £60 C. £70 D. £80 E. £100

Q14. The sum of three consecutive whole numbers is 84. What is the largest of the three numbers?

A. 27 B. 28 C. 29 D. 30 E. 31

Q15. A bakery sells 6 rolls for £2.10 or 10 rolls for £3.30. How much cheaper is each roll in the larger pack?

A. 1p B. 2p C. 3p D. 5p E. 12p

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