S3 National 4

Revision for November Test (2)

1. For early payment, Leon is given a 5% discount on his energy bill.
   The bill is £110.
   Calculate how much Leon will pay if he pays early.

2. In an election the votes for the candidates were as follows:
   Red Party 34%
   Blue Party 40%
   Green Party 16%
   Yellow Party 10%
   If 52 190 voters voted in the election, how many voted for the Blue Party?

3. Multiply out the brackets:
   (a) $5(x + 4)$ (b) $3(y – 5)$ (c) $2(2x + 3)$ (d) $x(x + 4)$ (e) $y(y – 3)$

4. Multiply out the brackets and collect like terms:
   $2(4x + 9) + 5x$

5. Solve the equations:
   (a) $2x + 5 = 19$ (b) $3y – 4 = 17$ (c) $3(x + 3) = 18$ (d) $5x + 2 = x + 26$

6. A photograph measures 15cm × 10 cm.
   Grace makes an enlargement which is 75cm long.
   Calculate the width of the enlargement.



7. Factorise:
   (a) $2x + 12$ (b) $3y + 15$ (c) $4z – 20$ (d) $xy + 5x$

8. Lauryn drives her car at 56mph for 1 hour 30 minutes along the motorway. What distance does she drive?

9. Charlie is an electrician. He is paid £9.50 per hour on weekdays and time-and-a-half on Saturdays.
   Calculate Charlie's wage in a week when he worked:
   Mon – Thurs 8am to 4pm
   Fri 8am to 2pm
   Sat 9am to 12 noon.

10. Hannah went on a shopping trip to New York.
    She bought a pair of jeans costing $49.
    Calculate how much the jeans cost in pounds if the exchange rate is £1 = $1.40.

11. Holly wants to buy a new computer.
    PC Universe have a suitable computer for £369.
    She can spread the cost with three equal monthly payments.
    (a) How much is each payment?

    Computers R Us have a same computer and are offering if for 10% deposit plus 12 monthly payments of £33.80.
    (b) How much more expensive is it to buy the computer from Computers R Us?

12. The speed limit on the A92 in 40mph.
    Which of these vehicles are travelling within the speed limit?
    Car A: 9 miles in 15 minutes
    Car B: 6.5 miles in 10 minutes
    Delivery van: 15 miles in 20 minutes

13. Max exchanges £100 receives 115€.
    How many euros will Abdu receive if he exchanges £150 at the same exchange rate?

14. The fastest speed ever recorded by a steam train is 202mph.
    A golden eagle can fly at a speed of 70 metres per second.
    Which is faster, the train or the eagle?
    You must give a reason for your answer.





15. Make an accurate reduction, scale factor ½ of the shape below.

