

Do not write on this sheet ~~~ Answer all questions

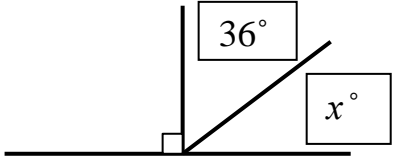
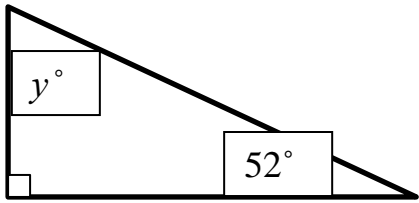
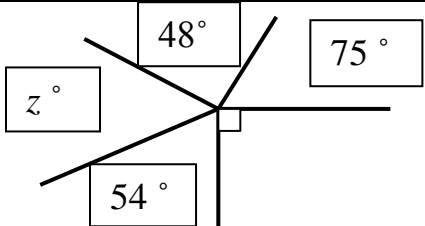
The *Reigate School* Maths Challenge
(Calculators are not to be used during the test)

| | |
|--------------------|-------------------------------------|
| 1. $135 + 412 + 2$ | 4. $34271 - 5186$ |
| 2. $364 - 31$ | 5. $\text{£}16.94 + \text{£}235.41$ |
| 3. 514×3 | 6. $\text{£}12.53 \times 8$ |

(6 marks)

| |
|--|
| 7. What is the total cost of 5 packets at 14p each, 10 tins at 62p each and 3 boxes at £2.27 each? |
|--|

(1 mark)

| | |
|---|---|
| 8. Calculate the missing angles: <i>(Diagrams are NOT drawn to scale)</i> |  |
|  |  |

(3 marks)

| | |
|-------------------------|----------------------------|
| 9. $253.76 + 471.95$ | 15. $-15 + -10$ |
| 10. $35 - 12 + 14 - 23$ | 16. $(32 \div 8) \times 5$ |
| 11. $4614 \div 3$ | 17. $9 \times (5 - 11)$ |
| 12. $24 + 12 \div 6$ | 18. 375×86 |
| 13. $57.3 - 24.1$ | 19. $3 \ 46.23$ |
| 14. $25 - 38$ | |

(11 marks)

| |
|-------------------------------------|
| 20. Divide £7.25 in the ratio 3 : 2 |
|-------------------------------------|

(1 mark)

| |
|---|
| 21. What is the average of the following numbers: 1, 3, 6, 8, 2, 3, 9, 5, 7, 16 |
|---|

(1 mark)

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22. Write the following numbers in order of size. Smallest number first:
101.3, 10.5, 1.05, -3, 1.5, 3

(1 mark)

23. If $a = 2$ $b = 8$ $c = 5$ $d = 10$ $e = -3$

- | | | |
|------------|--------------|-----------------|
| a) $a + b$ | d) $9a$ | g) ade |
| b) $b - d$ | e) $b - e$ | h) c^2 |
| c) cd | f) $7c + 2b$ | i) $3(7c - 2d)$ |

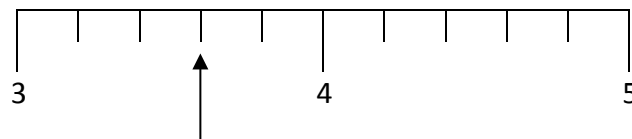
(9 marks)

24. Solve :-

- | | | |
|------------------|-------------------|--------------------------|
| a) $26 = 19 + x$ | d) $232 = 4x$ | g) $14x + 5 = 47$ |
| b) $x - 16 = 5$ | e) $56 = 4x + 4$ | h) $2(x - 5) = 6$ |
| c) $3x = 24$ | f) $10x - 7 = 53$ | i) $(3x + 4) \div 2 = 5$ |

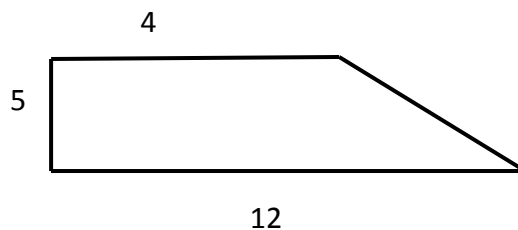
(9 marks)

25. What is the reading on this scale:-



(1 mark)

26. Find the total area in cm^2 of the shape below :



(1 mark)

27. If 5 drinks cost £10.15, how much would 3 cost?

(1 mark)

28. Write down the next **three** numbers in this sequence:

2, 3, 5, 8, 12, __, __, __

(1 mark)

29. How many minutes are there between 22:38 and 05:24

(1 mark)

30. Find :-

- | | | |
|----------------|----------------|------------------------------|
| a. 10% of £450 | b. 15% of £240 | c. $17\frac{1}{2}\%$ of £340 |
|----------------|----------------|------------------------------|

(3 marks)