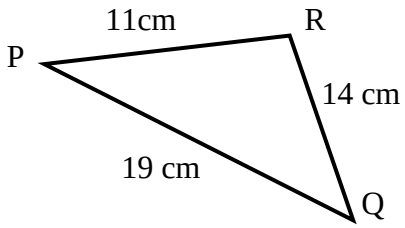
ALBA MATHEMATICS
National 5 Course Revision
Task Sheet 10

1. Solve $5 – 3(2x + 3) < 14$.

2. State the coordinates of the turning point and the equation of the axis of symmetry of the function $f(x) = (x -4)^2 + 5$.

3. Simplify $2\sqrt{18} + \sqrt{98} - 5\sqrt{2}$.

4. Calculate the size of angle PRQ in the triangle below.



5. Solve $2x^2 – 7x + 4 = 0$ correct to one decimal place.

6. A function has equation $f(x) = 25^x$. Evaluate $f(^{-3}/_2)$.

7. The cost of a holiday in 2015 was £891.25. This was 15% more than the cost the previous year. Calculate the cost of the holiday in 2014.

8. Fully factorise $4x^2 – 144$.

9. A function has equation $f(x) = 3x – 14$. If $f(p) = 10$, find the value of p.

10. Express $\frac{3}{x+1} + \frac{4}{3x}$ as a single fraction.