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(Department of Education).

INTERMEDIATE CERTIFICATE EXAMINATION, 1955.

ELEMENTARY MATHEMATICS (Algebra).

FOR GIRLS ONLY.

TUESDAY, 14th JUNE.—MORNING, 10 TO 12.

All questions to be answered.

All questions carry equal marks.

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1. Solve the following equations :

   (*a*) $9(5x-2)+4x=3x+5-2(2x-1)$;

   (*b*) $3x+7y=5$
   $7x+12y=-10$.

2. Find the value of $\frac{x^3-x^2-2x}{x^2+x}$ when (i) $x=5$ and (ii) $x=-4$.

3. Factorise :

   (i) $ac+bc-bd-da$;

   (ii) $12x^2+7x-12$;

   (iii) x^3+8y^3.

4. A girl spent 5s. 3d. in buying 2 dozen postcards. She bought some at $2\frac{1}{2}$d. each and the remainder at 3d. each. How many of each kind did she buy ?

5. Find, correct to one decimal place, the values of x which satisfy the equation $x^2+10x-1=0$.

6. Draw a graph of $y=x^2+x$ for values of x from $x=-3$ to $x=+3$.

   Use your graph to find, as accurately as you can, the values of x which satisfy the equation $x^2+x=5$.