

COMMON EXAMINATION FOR
ENTRANCE TO PUBLIC SCHOOLS.

ALGEBRA A.

[45 minutes.]

1. (i) Simplify $3p+2-2p+4-(p+4)$.
(ii) If $P=A(1+5R)$, find R when $P=260$, and $A=10$.

2. (i) Solve the equations:

$$\left. \begin{array}{l} x=3y \\ 2x-y=15 \end{array} \right\}$$

- (ii) Express in shillings

$\pounds a + b$ half-crowns $+ c$ sixpences.

If $a=b=c$ express your answer in terms of a .

3. A boy buys a number of oranges at fivepence each. He hopes to sell them and make a profit. Four oranges are bad and he sells the remainder at sevenpence each and finds that he has made neither profit or loss. How many oranges did he buy?

4. A piece of wood is x feet long.

I can either (i) cut it into 3 pieces of equal length and have three feet over, or (ii) cut it into 4 pieces of equal length and have four feet over.

In each case write down an expression for the length of a piece.

If the lengths in (i) are three feet longer than the lengths in (ii), write down an equation and solve it for x .

5. The average weekly earnings in shillings of workers in a certain industry are shown by the following table:

	s.
1959	280
1960	305
1961	320
1962	326
1963	345
1964	370
1965	388

Draw a graph to show this and from your graph estimate the weekly earnings in (i) 1958, (ii) 1966.

[Use one inch to represent 20 shillings on the vertical axis starting at 250 shillings.]

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