

A Maths Question, PSLE 2022

There were 9 red beads and some blue beads in a box. After some red beads were added, the fraction of blue beads was  $\frac{2}{5}$ . After 56 yellow beads were added, the fraction of the blue beads was  $\frac{2}{9}$ . What was the number of red beads added?

Paper 1, Q30

<< Ratio >>

<G. R.>

Let ① be the number of red beads added.

\*The number of blue beads remains unchanged.

Yellow	Red	Blue
0	9	?
+ 56	+ ①	
$\underbrace{\hspace{10em}}_{(4)}$	$\underbrace{\hspace{2em}}_3$	:
	3	2
	7	:
		2

<Writing>

$$5 - 2 = 3 \text{ (u)}$$

$$7 - 3 = 4 \text{ (u)} \quad \rightarrow \text{yellow beads}$$

$$56 \div 4 = 14 \text{ (beads)} \quad \rightarrow 1 \text{ unit}$$

$$14 \times 3 = 42 \text{ (beads)} \quad \rightarrow \text{red beads after added}$$

$$42 - 9 = 33 \text{ (beads)} \quad \rightarrow \text{red beads added}$$

Answer 33