

**AUSTRALIAN MATHEMATICS COMPETITION
WARM-UP PAPER
INTERMEDIATE 1**

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Questions 1 - 4, 3 marks each

1. $20 \div 0.2$ equals

- (A) 10 (B) 40 (C) 100 (D) 400 (E) 1000

2. The value of $\frac{1}{2} + \frac{1}{4} + \frac{1}{5} + \frac{1}{6} - \frac{1}{5} + \frac{1}{2} + \frac{5}{6} + \frac{3}{4}$ is

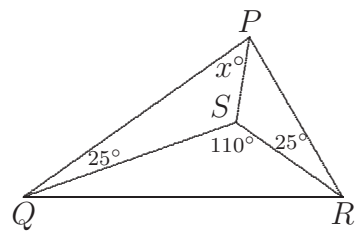
- (A) 4 (B) 3 (C) $2\frac{2}{3}$ (D) $3\frac{2}{3}$ (E) $2\frac{5}{6}$

3. A class contains 16 boys and 14 girls. If 4 more girls join the class, then the fraction of the class that is girls will be

- (A) $\frac{1}{2}$ (B) $\frac{2}{3}$ (C) $\frac{9}{15}$ (D) $\frac{8}{15}$ (E) $\frac{9}{17}$

4. S is a point inside $\triangle PQR$ such that $SP = SR$. The sizes of some of the angles are shown. Find x .

- (A) 5 (B) 15 (C) 25 (D) 35 (E) 45



Questions 5 - 8, 4 marks each

5. In the following subtraction some of the digits are represented by letters.

$$\begin{array}{r}
 a \ 4 \ b \ 7 \ c \\
 - \ 5 \ d \ 8 \ e \ 6 \\
 \hline
 2 \ 8 \ 4 \ 9 \ 9
 \end{array}$$

Which letter has the largest value?

- (A) a (B) b (C) c (D) d (E) e

