

$$\begin{aligned}
 22. \quad & \frac{\frac{7}{4} - \frac{5}{6}}{\frac{4}{7} + \frac{2}{5}} \times \frac{\frac{1}{19} - \frac{13}{59}}{19 - \frac{1}{2} - \frac{6}{31}} = \frac{\frac{4}{9} - \frac{4}{5}}{\frac{2}{45} + \frac{1}{8}} \times \frac{\frac{11}{9} - 13}{19 - \frac{62}{19}} \\
 & = \frac{\frac{1130}{19 \times 45}}{\frac{106}{90}} \times \frac{\frac{53}{59}}{\frac{19}{19}} = \frac{1130}{19} \times \frac{1}{45} \times \frac{90}{106} \times \frac{53}{5} \times \frac{19}{299} \\
 & = \frac{5 \times 226}{19} \times \frac{1}{45} \times \frac{45}{53} \times \frac{53}{5} \times \frac{19}{299} = \frac{226}{299}.
 \end{aligned}$$

$$\begin{aligned}
 23. \quad & \frac{\frac{10}{7} + \frac{18}{11}}{\frac{12}{7} - \frac{5}{11}} \times \frac{\frac{9}{4} - \frac{22}{24}}{\frac{50}{57} - \frac{110}{228}} = \frac{\frac{388}{97}}{\frac{97}{7 \times 11}} \times \frac{\frac{11 \times 19}{97}}{\frac{11 \times 14}{228}} \\
 & = \frac{388}{11} \times \frac{1}{97} \times \frac{77}{97} \times \frac{19}{14} \times \frac{228}{114} = 2.
 \end{aligned}$$

EXAMINATION PAPERS.

I.—Page 71.

$$\begin{aligned}
 2. \quad & 18\frac{3}{4} \times \$2\frac{2}{5} + 27\frac{1}{2} \times \$2\frac{3}{10} = \frac{75}{4} \times \$\frac{12}{5} + \frac{55}{2} \times \$\frac{3}{2} \\
 & = \frac{15}{4} \times \$12 + \frac{11}{2} \times \$\frac{3}{4} \\
 & = \$49\frac{1}{8}.
 \end{aligned}$$

$$\begin{aligned}
 3. \quad & \text{Sum} = 12\frac{3}{4} + 8\frac{3}{4} = 21\frac{2}{4} = 21\frac{1}{2}. \\
 & \text{Diff.} = 12\frac{3}{4} - 8\frac{3}{4} = 3\frac{3}{4}. \\
 & \text{And } 21\frac{1}{2} \div 3\frac{3}{4} = \frac{867}{40} \times \frac{4}{15} = 5\frac{82}{157}.
 \end{aligned}$$

$$\begin{aligned}
 4. \quad & \frac{4}{7} \text{ of } \frac{5}{11} \text{ of share} = \$3600; \\
 & \therefore \text{whole} = \frac{7}{4} \text{ of } \frac{11}{5} \text{ of } \$3600 = \$18860.
 \end{aligned}$$

5. Since the sum of two numbers added to their diff.
= twice the greater, we have

$$\begin{aligned}
 & 4\frac{1}{5} + 2\frac{4}{7} = \frac{237}{35} = \text{twice the greater}; \\
 & \therefore \text{greater} = \frac{237}{70} = 3\frac{27}{70}. \\
 & \text{And } 4\frac{1}{5} - 3\frac{27}{70} = \frac{57}{35} = \text{the less}.
 \end{aligned}$$