

$$= \frac{160}{360 \times 200}$$

7.

$$= \frac{26}{73}.$$

$$5 = 2\frac{2}{3}.$$

$$\frac{1}{12} = 1\frac{1}{2}.$$

$$8. \left(\frac{11}{13} \div \frac{2}{7}\right) \text{ of } 7\frac{7}{12} - 1\frac{3}{5} = \frac{11}{13} \times \frac{7}{2} \times \frac{9}{12} - 1\frac{3}{5} = 22\frac{1}{4} - 1\frac{3}{5} = 20\frac{13}{20}.$$

$$9. \left(\frac{4}{9} - \frac{3}{11}\right) (2\frac{3}{4} + 3\frac{2}{3}) = \frac{17}{9 \times 11} \times \frac{7}{12} = \frac{17}{9} \times \frac{7}{12} = 1\frac{11}{60}$$

$$11. \frac{(2 + \frac{1}{5}) \div (3 + \frac{1}{7})}{(\frac{1}{2} - \frac{1}{3}) \times (4 - 3\frac{3}{4})} = \frac{\frac{11}{5} \times \frac{7}{22}}{\frac{1}{6} \times \frac{1}{4}} = \frac{1}{5} \times \frac{7}{2} \times \frac{3}{1} \times \frac{7}{2} = 7\frac{7}{20}.$$

$$12. \frac{(3\frac{1}{3} - 2\frac{1}{2}) \div \frac{5}{6} \text{ of } \frac{3}{8}}{2\frac{2}{3} \div (\frac{1}{2} + \frac{1}{4})} = \frac{\frac{5}{6} \div \frac{5}{6}}{\frac{8}{3} \times \frac{4}{3}} = \frac{5}{6} \times \frac{1}{5} \times \frac{3}{8} \times \frac{3}{4} = \frac{3}{4}.$$

Note. Two or more fractions connected by *of* are always considered as *one* quality.

Miscellaneous Examples in Fractions.

Examples (xl). Page 69.

$$5. 3\frac{2}{5} \times 3\frac{3}{7} \div (1\frac{5}{7} \times 1\frac{1}{2}) = \frac{17}{5} \times \frac{24}{7} \times \frac{7}{12} \times \frac{2}{3} = \frac{21}{5} = 4\frac{1}{5}$$

NOTE.—Indicate all operations before performing any of them. It is much easier to simplify *before* performing the multiplication or division than *after*.

$$8. \left(\frac{1}{3} + \frac{4}{7}\right) \frac{20\frac{1}{2}}{3\frac{6}{7} + 2\frac{1}{4}} = \frac{19}{21} \times \frac{81}{15\frac{3}{4} + 9} = \frac{19}{21} \times \frac{27}{\frac{27}{4} + 9} = \frac{19}{7} \times \frac{63}{36 + 21} = 3.$$

$$9. (3\frac{4}{5} + 5\frac{1}{9} - \frac{1}{45}) (4\frac{1}{5} - 3\frac{1}{4}) = 8\frac{8}{9} \times \frac{19}{20} = \frac{4 \times 19}{9},$$

and $1\frac{5}{11} + 2\frac{1}{8} - (2\frac{9}{16} - \frac{1}{8} - \frac{1}{2}) = 3\frac{5}{8} - (2\frac{7}{8} - \frac{1}{2}) = 1\frac{1}{8}.$

$$\therefore \text{quotient} = \frac{4 \times 19}{9} \div 1\frac{1}{8} = \frac{64}{9} = 7\frac{1}{9}.$$

$$10. (1\frac{1}{3} + 2\frac{2}{7}) \left(\frac{5\frac{1}{6}}{4\frac{6}{7} + 1\frac{1}{4}} \right) = \frac{7}{21} \times \frac{81}{77\frac{5}{7} + 20} = \frac{7}{9} \times \frac{27}{544 + 140} = 3.$$

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