

Multiplying and Dividing Fractions

Name _____

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Find each product.

$$1) \frac{5}{6} \cdot \frac{7}{4} = \frac{35}{24} = \boxed{1 \frac{11}{24}}$$

$$2) \frac{2}{3} \cdot \frac{1}{4} = \frac{2}{12} = \boxed{\frac{1}{6}}$$

$$3) \frac{3}{5} \cdot \frac{1}{2} = \boxed{\frac{3}{10}}$$

$$4) 2\frac{3}{5} \cdot \frac{7}{6} = \frac{13}{5} \cdot \frac{7}{6} = \frac{91}{30} = \boxed{3\frac{1}{30}}$$

$$5) 1\frac{2}{5} \cdot \frac{4}{3} = \frac{7}{5} \cdot \frac{4}{3} = \frac{28}{15} = \boxed{1\frac{13}{15}}$$

$$6) 6\frac{1}{2} \cdot \frac{3}{2} = \frac{13}{2} \cdot \frac{3}{2} = \frac{39}{4} = \boxed{9\frac{3}{4}}$$

$$7) 2\frac{9}{10} \cdot \frac{3}{8} = \frac{29}{10} \cdot \frac{3}{8} = \frac{87}{80} = \boxed{1\frac{7}{80}}$$

$$8) 4 \cdot \frac{3}{7} = \frac{12}{7} = \boxed{1\frac{5}{7}}$$

$$9) 3\frac{4}{9} \cdot \frac{1}{9} = \frac{31}{9} \cdot \frac{1}{9} = \boxed{\frac{31}{81}}$$

$$10) 10\frac{3}{7} \cdot \frac{4}{5} = \frac{73}{7} \cdot \frac{4}{5} = \frac{292}{35} = \boxed{8\frac{12}{35}}$$

Find each quotient.

$$11) \frac{2}{3} \div \frac{11}{6} = \frac{2}{3} \times \frac{6}{11} = \frac{12}{33} = \boxed{\frac{4}{11}}$$

$$12) \frac{2}{5} \div \frac{11}{6} = \frac{2}{5} \times \frac{6}{11} = \boxed{\frac{12}{55}}$$

$$13) \frac{3}{2} \div \frac{9}{5} = \frac{3}{2} \times \frac{5}{9} = \frac{15}{18} = \boxed{\frac{5}{6}}$$

$$14) \frac{1}{2} \div 2\frac{3}{4} = \frac{1}{2} \times \frac{4}{11} = \frac{4}{22} = \boxed{\frac{2}{11}}$$

$$15) 3\frac{1}{7} \div \frac{3}{2} = \frac{22}{7} \times \frac{2}{3} = \frac{44}{21} = \boxed{2\frac{2}{21}}$$

$$16) 6 \div \frac{3}{4} = 6 \times \frac{4}{3} = \frac{24}{3} = \boxed{8}$$

$$17) 2 \div 4\frac{1}{6} \quad 2 \times \frac{6}{25} = \boxed{\frac{12}{25}}$$

$$18) 7\frac{2}{7} \div 2 \quad \frac{51}{7} \times \frac{1}{2} = \frac{51}{14} = \boxed{3\frac{9}{14}}$$

$$19) 2\frac{1}{2} \div 5\frac{3}{4} \quad \frac{5}{2} \times \frac{4}{23} = \frac{20}{46} = \boxed{\frac{10}{23}}$$

$$20) 4\frac{5}{6} \div \frac{1}{2} \quad \frac{29}{6} \times \frac{2}{1} = \frac{58}{6} = 9\frac{4}{6} = \boxed{9\frac{2}{3}}$$

Find each product.

$$21) 3\frac{1}{4} \cdot \frac{5}{3} \cdot \frac{1}{2} \quad \frac{13}{4} \cdot \frac{5}{3} \cdot \frac{1}{2} = \frac{65}{24} = \boxed{2\frac{17}{24}}$$

$$22) 4\frac{5}{9} \cdot 5\frac{1}{3} \cdot \frac{4}{5} \quad \frac{41}{9} \cdot \frac{16}{3} \cdot \frac{4}{5} = \frac{2624}{135} = \boxed{19\frac{59}{135}}$$

$$23) 1\frac{1}{5} \cdot 2\frac{1}{6} \cdot \frac{2}{3} \quad \frac{6}{5} \cdot \frac{13}{6} \cdot \frac{2}{3} = \frac{156}{90} = \frac{66}{45} = \boxed{1\frac{11}{15}}$$

$$24) 4\frac{7}{8} \cdot \frac{4}{5} \cdot \frac{1}{2} \quad \frac{39}{8} \cdot \frac{4}{5} \cdot \frac{1}{2} = \frac{156}{80} = \frac{76}{40} = \frac{38}{20} = \boxed{1\frac{19}{20}}$$

Evaluate each expression.

$$25) \left(1\frac{1}{2} + \frac{2}{5}\right) \left(5\frac{1}{2} + 2\right) \Rightarrow \left(\frac{19}{10}\right) \left(\frac{15}{2}\right) = \frac{285}{20} = \boxed{14\frac{1}{4}}$$

$$26) 1 + \frac{4}{3} \div 2\frac{3}{4} - \frac{4}{3} \Rightarrow \frac{33}{33} + \frac{16}{33} - \frac{44}{33} = \frac{49}{33} - \frac{44}{33} = \boxed{\frac{5}{33}}$$

$$27) 2 + \frac{1}{2} \div \left(\frac{3}{2} \cdot 2 - 1\frac{1}{2}\right) \Rightarrow 2 + \frac{1}{2} \div \left(\frac{3}{2} \cdot 2 - \frac{3}{2}\right) = 2 + \frac{1}{2} \div \left(\frac{6}{2} - \frac{3}{2}\right) = 2 + \frac{1}{2} \div \left(\frac{3}{2}\right) = 2 + \frac{1}{2} \cdot \frac{2}{3} = 2 + \frac{2}{6} = \frac{12}{6} + \frac{2}{6} = \frac{14}{6} = \boxed{2\frac{2}{3}}$$

$$28) 2\frac{2}{3} + \frac{3}{2} - \frac{3}{2} + \left(1\frac{1}{4} + 1\right) \cdot \frac{4}{5} \Rightarrow \frac{8}{3} + \frac{3}{2} - \frac{3}{2} + \left(\frac{5}{4} + \frac{1}{1}\right) \cdot \frac{4}{5} = \frac{8}{3} + \frac{3}{2} - \frac{3}{2} + \frac{9}{4} \cdot \frac{4}{5} = \frac{8}{3} + \frac{3}{2} - \frac{3}{2} + \frac{36}{20} = \frac{160}{60} + \frac{108}{60} = \frac{268}{60} = \boxed{4\frac{2}{15}}$$