

Multiplying Mixed Numbers

Date _____ Period _____

Multiply.

1) $1\frac{1}{4} * 1\frac{4}{6}$

2) $1\frac{3}{10} * 2\frac{2}{7}$

3) $3\frac{2}{8} * 1\frac{6}{15}$

4) $2\frac{1}{8} * 1\frac{3}{18}$

5) $1\frac{2}{5} * 3\frac{1}{5}$

6) $2\frac{5}{6} * 1\frac{2}{10}$

7) $1\frac{4}{5} * 1\frac{3}{10}$

8) $1\frac{4}{5} * 3\frac{3}{6}$

9) $1\frac{3}{5} * 1\frac{8}{17}$

Multiplying Mixed Numbers

Date _____ Period _____

Multiply.

1) $1\frac{1}{4} * 1\frac{4}{6}$

Answer: $2\frac{1}{12}$

2) $1\frac{3}{10} * 2\frac{2}{7}$

Answer: $2\frac{34}{35}$

3) $3\frac{2}{8} * 1\frac{6}{15}$

Answer: $4\frac{11}{20}$

4) $2\frac{1}{8} * 1\frac{3}{18}$

Answer: $2\frac{23}{48}$

5) $1\frac{2}{5} * 3\frac{1}{5}$

Answer: $4\frac{12}{25}$

6) $2\frac{5}{6} * 1\frac{2}{10}$

Answer: $3\frac{2}{5}$

7) $1\frac{4}{5} * 1\frac{3}{10}$

Answer: $2\frac{17}{50}$

8) $1\frac{4}{5} * 3\frac{3}{6}$

Answer: $6\frac{3}{10}$

9) $1\frac{3}{5} * 1\frac{8}{17}$

Answer: $2\frac{6}{17}$

Solution Steps

$$1) 1\frac{1}{4} * 1\frac{4}{6}$$

Convert the mixed numbers to improper fractions

$$1\frac{1}{4} = \frac{1 * 4 + 1}{4} = \frac{5}{4}$$

$$1\frac{4}{6} = \frac{1 * 6 + 4}{6} = \frac{10}{6}$$

$$\frac{5}{4} * \frac{10}{6}$$

$$\frac{(5 * 10)}{(4 * 6)}$$

$$\frac{(5 * 10^5)}{(4^2 * 6^3)}$$

$$4\frac{1}{6}$$

$$4) 2\frac{1}{8} * 1\frac{3}{18}$$

Convert the mixed numbers to improper fractions

$$2\frac{1}{8} = \frac{2 * 8 + 1}{8} = \frac{17}{8}$$

$$1\frac{3}{18} = \frac{1 * 18 + 3}{18} = \frac{21}{18}$$

$$\frac{17}{8} * \frac{21}{18}$$

$$\frac{(17 * 21)}{(8 * 18)}$$

$$\frac{(17 * 21^7)}{(8 * 18^6)}$$

$$2\frac{1}{48}$$

$$2) 1\frac{3}{10} * 2\frac{2}{7}$$

Convert the mixed numbers to improper fractions

$$1\frac{3}{10} = \frac{1 * 10 + 3}{10} = \frac{13}{10}$$

$$2\frac{2}{7} = \frac{2 * 7 + 2}{7} = \frac{16}{7}$$

$$\frac{13}{10} * \frac{16}{7}$$

$$\frac{(13 * 16^8)}{(10 * 7)}$$

$$\frac{(10^5 * 7)}{34}$$

$$2\frac{1}{35}$$

$$5) 1\frac{2}{5} * 3\frac{1}{5}$$

Convert the mixed numbers to improper fractions

$$1\frac{2}{5} = \frac{1 * 5 + 2}{5} = \frac{7}{5}$$

$$3\frac{1}{5} = \frac{3 * 5 + 1}{5} = \frac{16}{5}$$

$$\frac{7}{5} * \frac{16}{5}$$

$$\frac{(7 * 16)}{(5 * 5)}$$

$$4\frac{12}{25}$$

$$3) 3\frac{2}{8} * 1\frac{6}{15}$$

Convert the mixed numbers to improper fractions

$$3\frac{2}{8} = \frac{3 * 8 + 2}{8} = \frac{26}{8}$$

$$1\frac{6}{15} = \frac{1 * 15 + 6}{15} = \frac{21}{15}$$

$$\frac{26}{8} * \frac{21}{15}$$

$$\frac{(26 * 21)}{(8 * 15)}$$

$$\frac{(26^1 * 21^7)}{(8^4 * 15^5)}$$

$$4\frac{11}{20}$$

$$6) 2\frac{5}{6} * 1\frac{2}{10}$$

Convert the mixed numbers to improper fractions

$$2\frac{5}{6} = \frac{2 * 6 + 5}{6} = \frac{17}{6}$$

$$1\frac{2}{10} = \frac{1 * 10 + 2}{10} = \frac{12}{10}$$

$$\frac{17}{6} * \frac{12}{10}$$

$$\frac{(17 * 12)}{(6 * 10)}$$

$$\frac{(17 * 12^6)}{(6^1 * 10^5)}$$

$$20\frac{2}{5}$$

$$7) 1\frac{4}{5} * 1\frac{3}{10}$$

Convert the mixed numbers to improper fractions

$$1\frac{4}{5} = \frac{4 + 1 * 5}{5} = \frac{9}{5}$$

$$1\frac{3}{10} = \frac{3 + 1 * 10}{10} = \frac{13}{10}$$

$$\frac{9 * 10}{(9 * 13)}$$

$$\frac{(5 * 10)}{17}$$

$$2\frac{17}{50}$$

$$8) 1\frac{4}{5} * 3\frac{3}{6}$$

Convert the mixed numbers to improper fractions

$$1\frac{4}{5} = \frac{4 + 1 * 5}{5} = \frac{9}{5}$$

$$3\frac{3}{6} = \frac{3 * 6 + 3}{6} = \frac{21}{6}$$

$$\frac{9 * 6}{(9 * 21)}$$

$$\frac{(5 * 6)}{(9^3 * 21)}$$

$$\frac{(5 * 6^2)}{3}$$

$$6\frac{10}{10}$$

$$9) 1\frac{3}{5} * 1\frac{8}{17}$$

Convert the mixed numbers to improper fractions

$$1\frac{3}{5} = \frac{3 + 1 * 5}{5} = \frac{8}{5}$$

$$1\frac{8}{17} = \frac{8 + 1 * 17}{17} = \frac{25}{17}$$

$$\frac{8 * 17}{(8 * 25)}$$

$$\frac{(5 * 17)}{(8 * 25^5)}$$

$$\frac{(5^1 * 17)}{6}$$

$$2\frac{17}{17}$$