Name _____ Date _____ Class _____

LESSON 5-8

Practice A

Multiplying Mixed Numbers

Multiply. Write each answer in simplest form.

1. $\frac{1}{2} \cdot 1\frac{1}{3}$

$\frac{1}{2} \cdot \frac{}{3}$

_____

2. $1\frac{1}{5} \cdot \frac{4}{5}$

$\frac{}{5} \cdot \frac{4}{5}$

_____

3. $1\frac{1}{4} \cdot \frac{2}{3}$

$\frac{}{4} \cdot \frac{2}{3}$

_____

4. $1\frac{1}{8} \cdot \frac{2}{5}$

$\frac{}{8} \cdot \frac{2}{5}$

_____

5. $\frac{2}{5} \cdot 1\frac{1}{2}$

$\frac{2}{5} \cdot \frac{}{2}$

_____

6. $1\frac{3}{5} \cdot \frac{1}{3}$

$\frac{}{5} \cdot \frac{1}{3}$

_____

7. $\frac{2}{7} \cdot 1\frac{1}{4}$

_____

8. $\frac{2}{3} \cdot 1\frac{1}{10}$

_____

9. $\frac{1}{8} \cdot 1\frac{1}{2}$

_____

Find each product. Write the answer in simplest form.

10. $\frac{4}{5} \cdot 1\frac{1}{6}$

_____

11. $\frac{3}{5} \cdot 1\frac{1}{4}$

_____

12. $1\frac{3}{4} \cdot \frac{1}{3}$

_____

13. $2 \cdot 1\frac{1}{2}$

_____

14. $4 \cdot 2\frac{1}{4}$

_____

15. $5 \cdot 1\frac{1}{5}$

_____

16. Lin Li makes two and a half dollars per hour baby-sitting her little brother. How much money will she make if she baby-sits for 5 hours?

_____

17. Andrea is baking 2 batches of cookies. The recipe calls for $4\frac{1}{2}$ cups of flour for each batch. How many cups of flour will she use?

_____

LESSON 5-8

Practice A

Multiplying Mixed Numbers

Multiply. Write each answer in simplest form.

1. $\frac{1}{2} \cdot 1\frac{1}{3}$
   $\frac{1}{2} \cdot \frac{4}{3}$
   $\frac{2}{3}$

2. $1\frac{1}{5} \cdot \frac{4}{5}$
   $\frac{6}{5} \cdot \frac{4}{5}$
   $\frac{24}{25}$

3. $1\frac{1}{4} \cdot \frac{2}{3}$
   $\frac{5}{4} \cdot \frac{2}{3}$
   $\frac{5}{6}$

4. $1\frac{1}{8} \cdot \frac{2}{5}$
   $\frac{9}{8} \cdot \frac{2}{5}$
   $\frac{9}{20}$

5. $\frac{2}{5} \cdot 1\frac{1}{2}$
   $\frac{2}{5} \cdot \frac{3}{2}$
   $\frac{3}{5}$

6. $1\frac{3}{5} \cdot \frac{1}{3}$
   $\frac{8}{5} \cdot \frac{1}{3}$
   $\frac{8}{15}$

7. $\frac{2}{7} \cdot 1\frac{1}{4}$
   $\frac{5}{14}$

8. $\frac{2}{3} \cdot 1\frac{1}{10}$
   $\frac{11}{15}$

9. $\frac{1}{8} \cdot 1\frac{1}{2}$
   $\frac{3}{16}$

Find each product. Write the answer in simplest form.

10. $\frac{4}{5} \cdot 1\frac{1}{6}$
    $\frac{14}{15}$

11. $\frac{3}{5} \cdot 1\frac{1}{4}$
    $\frac{3}{4}$

12. $1\frac{3}{4} \cdot \frac{1}{3}$
    $\frac{7}{12}$

13. $2 \cdot 1\frac{1}{2}$
    3

14. $4 \cdot 2\frac{1}{4}$
    9

15. $5 \cdot 1\frac{1}{5}$
    6

16. Lin Li makes two and a half dollars per hour baby-sitting her little brother. How much money will she make if she baby-sits for 5 hours?
    $12\frac{1}{2}$ dollars or $12.50

17. Andrea is baking 2 batches of cookies. The recipe calls for $4\frac{1}{2}$ cups of flour for each batch. How many cups of flour will she use?
    9 cups

LESSON 5-8

Practice B

Multiplying Mixed Numbers

Multiply. Write each answer in simplest form.

1. $1\frac{2}{3} \cdot \frac{4}{5}$
   $1\frac{1}{3}$

2. $1\frac{7}{8} \cdot \frac{4}{5}$
   $1\frac{1}{2}$

3. $2\frac{3}{4} \cdot \frac{1}{5}$
   $\frac{11}{20}$

4. $2\frac{1}{6} \cdot \frac{2}{3}$
   $1\frac{4}{9}$

5. $2\frac{2}{5} \cdot \frac{3}{8}$
   $\frac{9}{10}$

6. $1\frac{3}{4} \cdot \frac{5}{6}$
   $1\frac{11}{24}$

7. $1\frac{1}{6} \cdot \frac{3}{5}$
   $\frac{7}{10}$

8. $\frac{2}{9} \cdot 2\frac{1}{7}$
   $\frac{10}{21}$

9. $2\frac{3}{11} \cdot \frac{7}{10}$
   $1\frac{13}{22}$

Find each product. Write the answer in simplest form.

10. $\frac{6}{7} \cdot 1\frac{1}{4}$
    $1\frac{1}{14}$

11. $\frac{5}{8} \cdot 1\frac{3}{5}$
    1

12. $2\frac{4}{9} \cdot \frac{1}{6}$
    $\frac{11}{27}$

13. $1\frac{3}{10} \cdot 1\frac{1}{3}$
    $1\frac{11}{15}$

14. $2\frac{1}{2} \cdot 2\frac{1}{2}$
    $6\frac{1}{4}$

15. $1\frac{2}{3} \cdot 3\frac{1}{2}$
    $5\frac{5}{6}$

16. Dominick lives $1\frac{3}{4}$ miles from his school. If his mother drives him half the way, how far will Dominick have to walk to get to school?
    $\frac{7}{8}$ mile

17. Katoni bought $2\frac{1}{2}$ dozen donuts to bring to the office. Since there are 12 donuts in a dozen, how many donuts did Katoni buy?
    30 donuts

LESSON 5-8

Practice C

Multiplying Mixed Numbers

Multiply. Write each answer in simplest form.

1. $\frac{5}{9} \cdot 2\frac{2}{7}$
   $1\frac{17}{63}$

2. $1\frac{11}{12} \cdot \frac{6}{7}$
   $1\frac{9}{14}$

3. $2\frac{4}{9} \cdot \frac{7}{8}$
   $2\frac{5}{36}$

4. $3\frac{2}{3} \cdot \frac{3}{5}$
   $2\frac{1}{5}$

5. $\frac{13}{14} \cdot 1\frac{3}{4}$
   $1\frac{5}{8}$

6. $2\frac{3}{10} \cdot \frac{5}{6}$
   $1\frac{11}{12}$

7. $1\frac{7}{8} \cdot \frac{3}{5}$
   $1\frac{1}{8}$

8. $3\frac{2}{7} \cdot \frac{3}{10}$
   $\frac{69}{70}$

9. $4\frac{2}{3} \cdot \frac{8}{9}$
   $4\frac{4}{27}$

Find each product. Write the answer in simplest form.

10. $\frac{10}{11} \cdot 3\frac{3}{7} \cdot 2$
    $6\frac{18}{77}$

11. $2\frac{4}{7} \cdot \frac{4}{5} \cdot 1\frac{1}{2}$
    $3\frac{3}{35}$

12. $\frac{9}{12} \cdot 2\frac{3}{5} \cdot 3\frac{1}{4}$
    $6\frac{27}{80}$

13. $6\frac{1}{5} \cdot 10 \cdot 3\frac{4}{5}$
    $235\frac{3}{5}$

14. $1\frac{7}{9} \cdot \frac{2}{5} \cdot 5\frac{1}{10}$
    $3\frac{47}{75}$

15. $2\frac{6}{7} \cdot 1\frac{8}{9} \cdot \frac{7}{8}$
    $4\frac{13}{18}$

Evaluate each expression.

16. $\frac{3}{4} \cdot c$ for $c = 4\frac{4}{5}$
    $3\frac{3}{5}$

17. $1\frac{3}{10} \cdot x$ for $x = 2\frac{2}{3}$
    $3\frac{7}{15}$

18. $\frac{2}{9} \cdot h$ for $h = 3\frac{5}{6}$
    $\frac{23}{27}$

19. $\frac{3}{4} \cdot q$ for $q = 2\frac{7}{8}$
    $2\frac{5}{32}$

20. A train travels at $110\frac{3}{10}$ miles per hour. At this rate, how far will the train travel in $2\frac{1}{2}$ hours?
    $275\frac{3}{4}$ miles

21. A sandbox is $1\frac{1}{3}$ feet tall, $1\frac{5}{8}$ feet wide, and $4\frac{1}{2}$ feet long. How many cubic feet of sand is needed to fill the box?
    (Volume = length • width • height)
    $9\frac{3}{4}$ cubic feet of sand

LESSON 5-8

Reteach

Multiplying Mixed Numbers

To find $\frac{1}{3}$ of $2\frac{1}{2}$, first change $2\frac{1}{2}$ to an improper fraction.

$2\frac{1}{2} = \frac{5}{2}$

Then multiply as you would with two proper fractions.

Check to see if you can divide by the GCF to make the problem simpler. Then multiply the numerators and multiply the denominators.

The problem is now $\frac{1}{3} \cdot \frac{5}{2}$.

$\frac{1 \cdot 5}{3 \cdot 2} = \frac{5}{6}$

So, $\frac{1}{3} \cdot 2\frac{1}{2}$ is $\frac{5}{6}$.

Rewrite each mixed number as an improper fraction. Is it possible to simplify before you multiply? If so, what is the GCF?

1. $\frac{1}{4} \cdot 1\frac{1}{3}$
   $= \frac{1}{4} \cdot \frac{4}{3}$
   $\frac{1}{3}$

2. $\frac{1}{6} \cdot 2\frac{1}{2}$
   $= \frac{1}{6} \cdot \frac{5}{2}$
   $\frac{5}{12}$

3. $\frac{1}{8} \cdot 1\frac{1}{2}$
   $= \frac{1}{8} \cdot \frac{3}{2}$
   $\frac{3}{16}$

4. $\frac{1}{3} \cdot 1\frac{2}{5}$
   $= \frac{1}{3} \cdot \frac{7}{5}$
   $\frac{7}{15}$

5. $1\frac{1}{3} \cdot 1\frac{2}{3}$
   $\frac{4}{3} \cdot \frac{5}{3}$
   $2\frac{2}{9}$

6. $1\frac{1}{2} \cdot 1\frac{1}{3}$
   $\frac{3}{2} \cdot \frac{4}{3}$
   2

7. $1\frac{3}{4} \cdot 2\frac{1}{2}$
   $\frac{7}{4} \cdot \frac{5}{2}$
   $4\frac{3}{8}$

8. $1\frac{1}{6} \cdot 2\frac{2}{3}$
   $\frac{7}{6} \cdot \frac{8}{3}$
   $3\frac{1}{9}$

9. $3\frac{1}{3} \cdot \frac{2}{5}$
   $1\frac{1}{3}$

10. $2\frac{1}{2} \cdot \frac{1}{5}$
    $\frac{1}{2}$

11. $1\frac{3}{4} \cdot 2\frac{1}{2}$
    $4\frac{3}{8}$

12. $3\frac{1}{3} \cdot 1\frac{1}{5}$
    4