Book Five Final Review

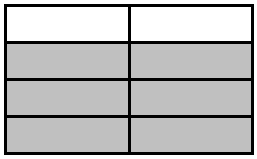
You will now practice all the skills you learned in Book 5. You can use this as a review for your final test.

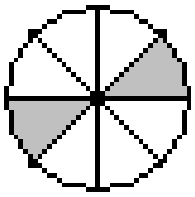
If you can't remember how to do a question, go back to the lesson on this topic to refresh your memory. The unit and topic for where each question came from is listed next to the question.

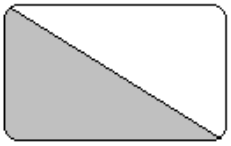
Example: **1A** means Unit 1, Topic A

1-A

1. Write in lowest terms the common fractions to describe the shaded portion of each shape.







a) _____ b) _____ c) _____

2. Draw your own fractions.

a) $\frac{1}{5}$ b) $\frac{3}{7}$

3. Answer the questions using a common fraction, in lowest terms.

    a) Rattan ran for 40 minutes. What fraction of an hour did he run?

b) Oliver answered 23 of the 27 questions on his test. What fraction of questions did he answer?

c) Belle got 49 marks on the test. The test was out of 56. What was her score?

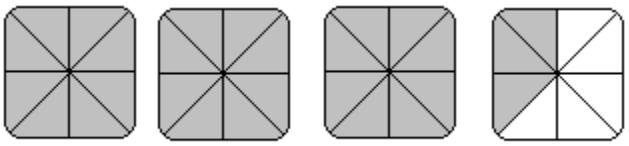
1-B

4. Identify each fraction by writing: **proper fraction, improper fraction,** or **mixed number** next to each fraction.

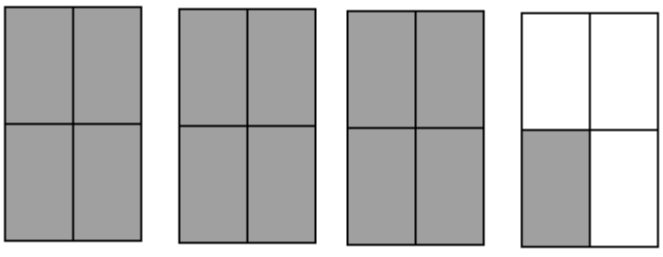
a) $\frac{5}{2}$ _____ b) $2\frac{1}{3}$ _____

c) $\frac{4}{5}$ _____ d) $\frac{7}{3}$ _____

5. Write the improper fraction and the equivalent mixed number that describe the shaded part in each drawing.



a) _____ _____



b) _____ _____

6. Rename each improper fraction into a mixed number.

a) $\frac{11}{5} =$ _____ b) $\frac{15}{4} =$ _____ c) $\frac{19}{6} =$ _____

7. Rename each whole number as an improper fraction. Use the denominator given to you.

a) $5 = \frac{\quad}{2}$ b) $3 = \frac{\quad}{5}$ c) $8 = \frac{\quad}{3}$

8. Rename each mixed number as an improper fraction.

a) $2\frac{3}{8} =$ _____ b) $6\frac{5}{9} =$ _____ c) $1\frac{2}{3} =$ _____

2-A

9. Find the factors, common factors and the Greatest Common Factor (G.C.F.)

	Fraction	**Factors**	**Common Factors**	**G.C.F**
a	$\frac{4}{22}$			
b	$\frac{12}{48}$			
c	$\frac{27}{36}$			
d	$\frac{12}{40}$			

10. Express each fraction in lowest terms.

a) $\frac{7}{21} =$ _____

b) $\frac{9}{24} =$ _____

c) $\frac{10}{250} =$ _____

d) $\frac{12}{36} =$ _____

11. State if each pair of fractions is equivalent (=) or not equivalent (≠) by placing the correct sign between them.

a) $\frac{3}{4}$ _____ $\frac{31}{42}$

b) $\frac{1}{7}$ _____ $\frac{5}{35}$

c) $\frac{4}{13}$ _____ $\frac{6}{39}$

d) $\frac{1}{3}$ _____ $\frac{11}{13}$

12. Round to the nearest whole number.

a) $2\frac{1}{6}$ _____

b) $1\frac{4}{5}$ _____

c) $\frac{3}{5}$ _____

3-A

13. Write the multiplication equation you would use to find the answer to the question. **Do not calculate the answer.**

a) Joona peeled $\frac{3}{4}$ of the 35 kilograms of apples. How many kilograms of apples did Joona peel?

b) There are 16 bottles of ketchup in the restaurant. They are each 1/4 full. How many full bottles of ketchup would there be if all the ketchup bottles were put together?

c) Half a recipe that needs $2\frac{2}{3}$ cups of sugar.

d) The community pool has a capacity of 150 swimmers. The pool is $\frac{1}{5}$ full. How many swimmers are there?

14. Find the products. Make sure your answers are in lowest terms.

a) $\frac{1}{3} \times \frac{4}{5} =$

b) $\frac{1}{3}$ of $34 =$

c) $4 \times \frac{3}{5} =$

d) $\frac{5}{7}$ of $1\frac{1}{5} =$

e) $2\frac{1}{2} \times 7\frac{1}{2} =$

f) $\frac{3}{4} \times \frac{1}{7} \times 4\frac{5}{9} =$

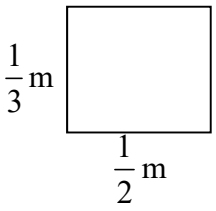
15. Solve the following word problems.

a) Thu saves $\frac{1}{5}$ of her income for the down payment on a house. If her annual income is $34 458.00, how much can she save in one year?

b) $\frac{1}{3}$ of the students at one Vancouver college speaks a language other than English. $\frac{3}{4}$ of those students are studying ESL. What fraction of the students are studying ESL?

c) A recipe calls for $1\frac{1}{2}$ cups of sugar. How much sugar should be used if the recipe is being tripled?

d) Find the area of the rectangle



e) A corner store sells 2 345 items in one day. $\frac{4}{5}$ of those items are junk food. How many of the items are junk food?

16. Divide the following fractions. Show all your work, and make sure your answers are in the lowest terms.

a) $\frac{1}{3} \div \frac{3}{4} =$

b) $\frac{1}{2} \div \frac{3}{5} =$

c) $\frac{3}{5} \div 9 =$

d) $3\frac{2}{3} \div \frac{1}{2} =$

e) $5\frac{1}{5} \div \frac{6}{7} =$

f) $4\frac{1}{3} \div 2\frac{2}{5} =$

17. Solve the following word problems

a) Kathy worked on planting garlic last weekend. It took her $3\frac{1}{2}$ minutes to plant one row. How many rows did she plant in $\frac{1}{3}$ of an hour?

(one hour = 60 minutes)

b) Nicole knits socks in the evenings. It takes her $7\frac{1}{3}$ hours to knit one sock. How many hours does it take to knit a pair of socks (that is 2 socks) ?

c) Last week Nicole knit for a total of $27\frac{1}{2}$ hours. **Approximately** how many socks could she knit in that time? (To get an approximate, round your numbers to whole numbers first)

d) Faisal travels $43\frac{1}{3}$ km on the sky train each week. He travels 5 days a week. How far does he travel each day?

e) A baking sheet is $39\frac{3}{5}$ cm by $18\frac{1}{4}$ cm. Find its area.

4-A

18. Add these common fractions, make sure to reduce your answer to the lowest terms.

a) $\begin{array}{r} \frac{1}{5} \\ +\frac{4}{5} \\ \hline \end{array}$

b) $\begin{array}{r} \frac{3}{5} \\ +\frac{6}{7} \\ \hline \end{array}$

c) $\frac{2}{7} + \frac{3}{4} =$

d) $\frac{2}{3} + \frac{5}{9} =$

e) $\begin{array}{r} \frac{5}{12} \\ +\frac{5}{8} \\ \hline \end{array}$

f) $\begin{array}{r} \frac{2}{3} \\ +\frac{5}{6} \\ \hline \end{array}$

19. Add these mixed numbers, express the sum in the lowest terms.

a) $4\frac{2}{5} + 7\frac{4}{7}$

b) $2\frac{1}{3} + 4\frac{3}{4} =$

c) $1\frac{2}{3} + 3\frac{1}{2} + 3\frac{3}{4} =$

d) $4\frac{1}{8} + 1\frac{1}{4} =$

e) $4\frac{1}{9} + 2\frac{2}{3}$

f) $2\frac{7}{15} + 10\frac{1}{5}$

20. Subtract these common fractions. Express your answer in lowest terms.

a) $\frac{5}{12} - \frac{1}{3}$

b) $\frac{5}{6} - \frac{3}{4}$

c) $\frac{1}{2} - \frac{9}{24}$

d) $\frac{4}{5} - \frac{1}{4} =$

e) $\frac{30}{35} - \frac{2}{5} =$

f) $\frac{1}{2} - \frac{5}{12} =$

21. Subtract these mixed numbers, express your answer in lowest terms.

a) $7\frac{2}{3}$
$-2\frac{1}{6}$

b) $2\frac{4}{7}$
$-1\frac{5}{21}$

c) $9\frac{1}{5}$
$-4\frac{4}{25}$

d) $3\frac{1}{2}-1\frac{4}{7}=$

e) $6\frac{1}{8}-3\frac{3}{4}=$

f) $5\frac{1}{2}-2\frac{7}{8}=$

22. Solve the following word problems.

a) A concrete contractor needs $6\frac{1}{3}$ metre of wire mesh for a concrete walkway and $12\frac{3}{8}$ metres of wire mesh for a driveway. If the contractor starts with a roll that is $54\frac{1}{4}$ metres long, how much wire mesh is left at the end of the two jobs?

b) Frida and Sean collect returnable bottles and cans. Frida has $3\frac{1}{3}$ bags of returnables. Sean has $4\frac{1}{2}$ bags to return. How much more does Sean have than Frida?

c) Mike bought $5\frac{1}{4}$ metres of silk to sew three shirts. Each shirt took $1\frac{3}{5}$ of material. How much silk is left over?

d) A freight container is loaded with 3 groups of products. Group A weighs $58\frac{1}{2}$ tons, Group B weighs $23\frac{5}{8}$ tons and Group C weighs $29\frac{1}{4}$ tons. Find the weight of the products.

e) If the loaded container in question d) is $189\frac{3}{5}$ tons, what is the weight of the empty container?

5-A

23. Write as a common fraction in lowest terms.

a) 0.75 _____ b) $0.1\overline{6}$ _____

c) 0.1 _____ d) 0.4 _____

e) 1.6 _____ f) 2.625 _____

g) $3.\overline{3}$ _____ h) 0.125 _____

24. Write as decimals. Round your answer to 3 decimal places.

a) $\frac{3}{8}$ _____ b) $\frac{1}{3}$ _____

c) $\frac{3}{4}$ _____ d) $\frac{1}{20}$ _____

e) $\frac{1}{8}$ _____ f) $1\frac{2}{3}$ _____

g) $\frac{1}{5}$ _____ h) $\frac{6}{6}$ _____

25. Compare the following fractions, use < or >.

a) $\frac{2}{3}$ _____ $\frac{1}{4}$

b) $\frac{2}{5}$ _____ $\frac{4}{7}$

c) $\frac{5}{9}$ _____ $\frac{1}{3}$

d) $\frac{7}{12}$ _____ $\frac{2}{3}$

26. Compare the following fractions to decimals. Use < , >, or =.

a) $\frac{1}{2}$ _____ 0.5

b) $\frac{2}{3}$ _____ 0.625

c) 0.125 _____ $\frac{1}{8}$

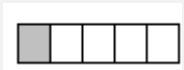
d) $\frac{4}{9}$ _____ 0.6

e) 3.45 _____ $3\frac{1}{6}$

f) $\frac{1}{5}$ _____ 0.3

Answers to Book Five Final Review:

1. a) $\frac{3}{4}$ b) $\frac{1}{4}$ c) $\frac{1}{2}$

2. a)  b) 

3. a) $\frac{2}{3}$ b) $\frac{23}{27}$ c) $\frac{7}{8}$

4. a) improper fraction b) mixed number c) proper fraction d) improper fraction

5. a) $\frac{27}{8}$, $3\frac{3}{8}$ b) $\frac{13}{4}$, $3\frac{1}{4}$

6. a) $2\frac{1}{5}$ b) $3\frac{3}{4}$ c) $3\frac{1}{6}$

7. a) 10 b) 15 c) 24

8. a) $\frac{19}{8}$ b) $\frac{59}{9}$ c) $\frac{5}{3}$

9.	**Fraction**	**Factors**	**Common Factors**	**G.C.F**
a)	$\frac{4}{22}$	1, 2, 4 1, 2, 11, 22	2	2
b)	$\frac{12}{48}$	1, 2, 3, 4, 6, 12 1, 2, 3, 4, 6, 8, 12, 16, 24, 48	2, 3, 4, 6, 12	12
c)	$\frac{27}{36}$	1, 3, 9, 27 1, 2, 3, 4, 6, 9, 12, 18, 36	3, 9	9
d)	$\frac{12}{40}$	1, 2, 3, 4, 6, 12 1, 2, 4, 5, 8, 10, 20, 40	2, 4,	4

10. a) $\frac{1}{3}$ b) $\frac{3}{8}$ c) $\frac{1}{25}$ d) $\frac{1}{3}$

11. a) ≠ b) = c) ≠ d) ≠

12. a) 2 b) 2 c) 1

13. a) $\frac{3}{4}\times\frac{35}{1}$ b) $16\times\frac{1}{4}$ c) $\frac{1}{2}\times 2\frac{2}{3}$ d) $150\times\frac{1}{5}$

14. a) $\frac{4}{15}$ b) $11\frac{1}{3}$ c) $2\frac{2}{5}$ d) $\frac{6}{7}$ e) $18\frac{3}{4}$ f) $\frac{41}{84}$

15. a) \$ $6891\frac{3}{5}$ b) $\frac{1}{4}$ c) $4\frac{1}{2}$ cups d) $\frac{1}{6}$ m^2 e) 1876

16. a) $\frac{4}{9}$ b) $\frac{5}{6}$ c) $\frac{1}{15}$ d) $7\frac{1}{3}$ e) $6\frac{1}{15}$ f) $1\frac{29}{36}$

17. a) $5\frac{5}{7}$ rows b) $14\frac{2}{3}$ hours c) 4 socks d) $8\frac{2}{3}$ km e) $722\frac{7}{10}$ cm^2

18. a) 1 b) $1\frac{16}{35}$ c) $1\frac{1}{28}$ d) $1\frac{2}{9}$ e) $1\frac{1}{24}$ f) $1\frac{1}{2}$

19. a) $11\frac{34}{35}$ b) $7\frac{1}{12}$ c) $8\frac{11}{12}$ d) $5\frac{3}{8}$ e) $6\frac{7}{9}$ f) $12\frac{2}{3}$

20. a) $\frac{1}{12}$ b) $\frac{1}{12}$ c) $\frac{1}{8}$ d) $\frac{11}{20}$ e) $\frac{16}{35}$ f) $\frac{1}{12}$

21. a) $5\frac{1}{2}$ b) $1\frac{1}{3}$ c) $5\frac{1}{25}$ d) $1\frac{13}{14}$ e) $2\frac{3}{8}$ f) $2\frac{5}{8}$

22. a) $35\frac{13}{24}$ m b) $1\frac{1}{6}$ more c) $\frac{9}{20}$ metres d) $111\frac{3}{8}$ tonnes e) $78\frac{3}{8}$ tonnes

23. a) $\frac{3}{4}$ b) $\frac{1}{6}$ c) $\frac{1}{10}$ d) $\frac{2}{5}$ e) $1\frac{3}{5}$ f) $2\frac{5}{8}$

g) $3\frac{1}{3}$ h) $\frac{1}{8}$

24. a) 0.375 b) $0.\overline{3}$ c) 0.75 d) 0.05 e) 0.125 f) $1.\overline{6}$

g) 0.2 h) 1

25. a) > b) < c) > d) <

26. a) = b)> c) = d) < e) > f) <