

1. Write the mixed number as an improper fraction

$$7\frac{2}{3}$$

2. Write the improper fraction as a mixed number.

$$\frac{75}{4}$$

3. Write each fraction in simplest form.

a.  $\frac{24}{210}$

b.  $-\frac{42x}{70}$

4. Find the prime factorization of the following number.

84

5. Perform each indicated operation and write the answers in simplest form.

a.  $\frac{4}{4} \div \frac{3}{4}$

b.  $\frac{7x}{9} + \frac{x}{9}$

c.  $-\frac{2}{3} \cdot -\frac{8}{15}$

d.  $\frac{9a}{10} + \frac{2}{5}$

e.  $-\frac{8}{15y} - \frac{2}{15y}$

f.  $3\frac{7}{8}$

g. 19

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

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

$$\begin{array}{r} 7\frac{2}{5} \\ + \\ 2\frac{3}{4} \\ \hline \end{array}$$

$$\begin{array}{r} 19 \\ - \\ 2\frac{3}{11} \\ \hline \end{array}$$

6. Simplify each complex fraction.

a.  $\frac{\frac{5x}{7}}{\frac{20x^2}{21}}$

7. Solve.

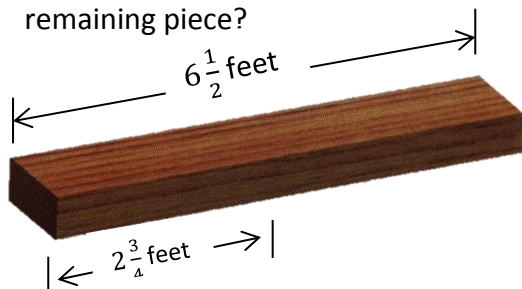
a.  $-\frac{3}{8}x = \frac{3}{4}$

b.  $\frac{x}{5} + x = -\frac{24}{5}$

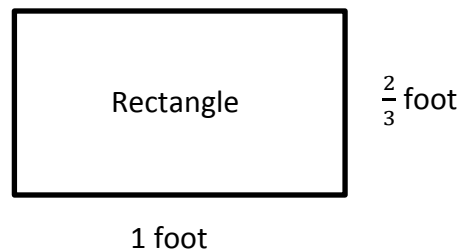
c.  $\frac{2}{3} + \frac{x}{4} = \frac{5}{12} + \frac{x}{2}$

8. Solve.

A carpenter cuts a piece  $2\frac{3}{4}$  feet long from a cedar plank that is  $6\frac{1}{2}$  feet long. How long is the remaining piece?



9. Find the perimeter and area of the figure below.



Answers Math 0302 Practice Test 2

1.	$\frac{23}{3}$
2.	$18\frac{3}{4}$
3a.	$\frac{4}{35}$
3b.	$-\frac{3x}{5}$
4.	$2^2 \cdot 3 \cdot 7$
5a.	$\frac{4}{3}$
5b.	$\frac{8x}{9}$
5c.	$\frac{16}{45}$
5d.	$\frac{9a + 4}{10}$
5e.	$-\frac{2}{3y}$
5f.	$14\frac{1}{40}$
5g.	$16\frac{8}{11}$
5h.	$\frac{45}{2}$
5i.	$\frac{9}{16}$
6a.	$\frac{3}{4x}$
7a.	$x = -2$
7b.	$x = -4$
7c.	$x = 1$
8.	$3\frac{3}{4}$ feet
9.	Perimeter : $3\frac{1}{3}$ feet
	Area = $\frac{2}{3}$ feet <sup>2</sup>