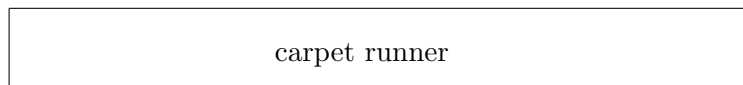


Math 201 Review for Exam 2 Fall 2009

1. (a) Use drawings of rectangular or circular regions to find the larger of $\frac{2}{3}$ and $\frac{3}{5}$.
(b) The piece of carpet runner pictured below is $1\frac{3}{7}$ yards long. Draw as accurately as possible a piece that is $1\frac{5}{7}$ yards long. If the $1\frac{3}{7}$ yard piece cost \$10, how much should the $1\frac{5}{7}$ yard piece cost? Show your work.



2. (a) Express the fractions $\frac{12}{13}$ and $\frac{17}{16}$ in decimal form. Show all your work.

(b) Complete the following sentence:

A fraction can be represented as a terminating decimal if and only if ...

(c) Find a fraction between $\frac{9}{17}$ and $\frac{10}{17}$.

(d) Find a decimal between 1.234567 and $1.2345\overline{67}$.

(e) Write the following decimals as fractions: 1.2345 and $1.\overline{67}$

3. Perform the operation and express the answer in simplest form:

(a) $\frac{11}{27} + \frac{13}{72} =$ (b) $\frac{13}{77} - \frac{3}{28} =$ (c) $\frac{25}{21} \times \frac{7}{45} =$ (d) $\frac{33}{27} \div \frac{22}{45} =$

4. Perform the operation and express the answer in simplest form. Write the answer as a mixed fraction when possible.

(a) $1\frac{3}{5} + 2\frac{1}{3} =$ (b) $2\frac{3}{4} - 1\frac{5}{6} =$ (c) $1\frac{2}{3} \times 2\frac{3}{5} =$ (d) $2\frac{3}{4} \div 1\frac{1}{5} =$

5. (a) Decide which of the following is the greater: $\frac{13}{27}$, $\frac{31}{63}$. Justify your answer.

(b) Write a word problem for the subtraction $5\frac{1}{4} - 1\frac{7}{8}$.

6. (a) Write out an explanation, with sketches, to answer the following. After a farmer had prepared $\frac{3}{4}$ of the field, he planted $\frac{4}{5}$ of the prepared part of the field with tomatoes. What part of the field did he plant with tomatoes?

(b) Make a drawing and give an explanation for this story problem: A piece of fabric is $\frac{3}{4}$ of a yard long. Costume belts for a choir require $\frac{3}{16}$ of a yard each. How many belts can be made from the piece of fabric?

7. Alex prepared a big pot of chili. On Monday she and her friends ate $\frac{2}{3}$ of the dish. Her older brother ate $\frac{1}{4}$ of what was left on Tuesday. Finally, her room mate ate $\frac{1}{2}$ of the left-overs on Wednesday. How much of the whole pot was left for lunch on Thursday?

8. At Mobile High the ratio of seniors that enrolled in AP classes to those that did not is two to three. Two of every three seniors that take AP classes are female. What fraction of the graduating senior class are female students that take AP courses.

9. Peter, Paul and Mary share a big package of cookies. Paul eats twice as many cookies as Mary. Peter eats only $\frac{2}{3}$ as many as Paul. "You had 3 cookies more than I, Peter," says Mary. How many cookies did each of them eat?

10. Use drawings of chips in two colors to find the following:

(a) $-5 - 2 =$ (b) $5 +^{-} 2 =$ (c) $^{-} 5 + 2 =$ (d) $5 -^{-} 2 =$

11. Review quizzes 6 through 12.