

Each of the 23 questions is worth 4 points plus 1 point for each of 8 homework problems = 100

Write the fraction.

- 1) According to a recent study, 2 out of 10 visits to a hospital emergency room were for an injury. What fraction of emergency room visits are NOT injury-related?

Write the mixed number as an improper fraction.

2) $25\frac{13}{21}$

Write the improper fraction as a mixed or whole number.

3) $\frac{47}{5}$

Write the prime factorization of the number.

4) 66

Write the fraction in simplest form.

5) $\frac{18xy}{45x^2}$

Solve. Write the fraction in simplest form.

- 6) Sally bought a used car for \$11,700. Her old car was traded in for \$4500. What fraction of the purchase price was not covered by the trade-in?

Multiply. Write the answer in simplest form.

7) $\frac{5}{12} \cdot \frac{48}{35}$

Divide and simplify.

8) $4x \div \frac{x^3}{24}$

Solve. Write the fraction in simplest form.

- 9) Mary's Cinema received \$4653 in movie admission tickets for one day. About $\frac{3}{11}$ of this amount was for G-rated movies. Find the amount of money received from G-rated movies.

Add or subtract as indicated. Write the answer in simplest form.

10) $-\frac{7}{17} + \frac{2}{17} + \frac{4}{17}$

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Solve. Write the fraction in simplest form.

- 11) Tara read $\frac{1}{12}$ of her book on Monday, $\frac{2}{12}$ of her book on Tuesday, and $\frac{1}{12}$ of her book on Wednesday. What part of her book has she read?

Find the LCD of the list of fractions.

12) $\frac{7}{20}, \frac{1}{6}, \frac{2}{5}$

Add or subtract as indicated. Write the answer in simplest form.

13) $\frac{2x}{13} + \frac{4x}{9}$

Evaluate the expression for the given replacement values. Write the answer in simplest form.

14) $-4x + y$ for $x = -\frac{1}{2}, y = \frac{5}{4}$

Solve. Write the fraction in simplest form.

- 15) In a product survey comparing several soft drinks, $\frac{47}{581}$ of those asked preferred Drink A, and $\frac{13}{166}$ of those asked preferred Drink B. Which drink was preferred by more people?

Simplify.

16) $\left(1 - \frac{4}{7}\right)^2$

17) $\frac{1}{3} + \frac{1}{9} \cdot \frac{1}{4}$

Perform the indicated operation. Write the answer as a mixed number in simplest form.

18) $1\frac{3}{4} \div \frac{1}{3}$

Add or subtract as indicated. Write the answer as a mixed number in simplest form.

19) $17\frac{3}{5} + 18\frac{1}{4}$

Solve. Write the answer as a mixed number in simplest form.

- 20) Ellen is knitting a scarf with one 7 -inch blue stripe, one $2\frac{1}{3}$ -inch green stripe, and one $3\frac{1}{2}$ -inch white stripe. How wide is the scarf?

Solve.

21) $x - \frac{10}{21} = -\frac{4}{21}$

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$$22) \frac{12}{35}x = -\frac{16}{21}$$

$$23) \frac{x}{6} - x = -4$$