

Pre-Algebra Chapter 5 Pre-Test

- 1.) (5 pts each, 10 pts total) (2-1) Find the lowest common denominator (LCD) of each pair of fractions. Write equivalent fractions using the LCD and compare. Use $>$, $<$, or $=$ to compare each statement.

a) $\frac{23}{36}$ and $\frac{4}{6}$

b) $\frac{5}{8}$ and $\frac{8}{12}$

- 2.) (5 pts) (2-2) Write the decimal as a fraction.

0.63333...

- 3.) (5 pts each, 10 points total) Convert as required.

a) Write 0.65 as a fraction.

b) Write $\frac{3}{8}$ as a decimal.

4.) (5 pts each, 10 pts total) (5-3) Find each difference. Reduce if needed.

a) $\frac{2}{3} - \frac{9}{15}$

b) $8\frac{1}{3} - 3\frac{5}{6}$

5.) (5 pts each, 10 pts total) (5-3) Find each sum. Write as either an improper fraction or mixed number. Reduce if needed.

a) $\frac{5}{6} + \frac{4}{9}$

b) $7\frac{5}{12} + 2\frac{7}{16}$

6.) (5 pts each, 10 pts total) (5-4) Find the product.

a) $4\frac{1}{3} \times \frac{9}{2}$

b) $\frac{4}{7} \times \frac{14}{16}$

7.) (5 pts each, 10 pts total) (5-4) Find the quotient.

a) $5\frac{1}{4} \div \frac{7}{8}$

b) $\frac{11}{12} \div \frac{2}{3}$

8.) (5 pts each, 15 points total) (5-7) Solve each equation.

a) $x + \frac{3}{4} = \frac{7}{12}$

b) $y - \frac{1}{7} = \frac{3}{5}$

c) $z - 5\frac{1}{2} = 6\frac{7}{10}$

9.) (5 pts each, 10 points total) (5-8) Solve each equation.

a) $\frac{-8}{3}x = 2\frac{4}{6}$

b) $7\frac{9}{13}x = \frac{1}{8}$

10.) (5 pts each, 10 points total) (5-9) Simplify each expression.

a) $\left(\frac{a^3b^5}{c^2}\right)^3$

b) $\left(\frac{x^4y^6}{2z^2}\right)^4$