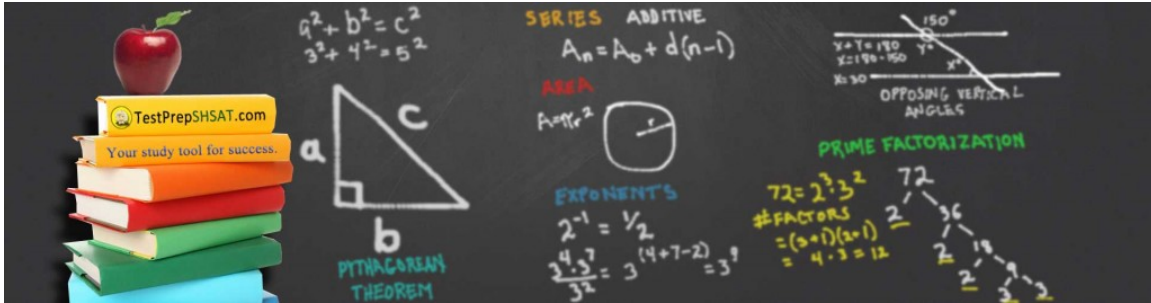


Name:

Date:



WORKSHEET :



Common Denominators

- $\frac{1}{3} + \frac{1}{4} =$ $\frac{1}{2} + \frac{1}{3} =$ $\frac{1}{4} + \frac{1}{5} =$
- $\frac{2}{7} + \frac{4}{5} =$ $\frac{3}{8} + \frac{12}{9} =$ $\frac{4}{5} + \frac{3}{2} =$
- $\frac{4}{5} - \frac{1}{5} =$ $\frac{4}{7} - \frac{1}{3} =$ $\frac{1}{2} - \frac{3}{8} =$
- $\frac{7}{9} + \frac{3}{5} - \frac{2}{3} =$ $\frac{1}{2} + \frac{1}{3} + \frac{1}{5} =$ $\frac{2}{5} + \frac{2}{3} - \frac{5}{8} =$
- $\frac{1}{a} + \frac{1}{b} =$ $\frac{2}{x} - \frac{5}{y} =$ $\frac{3}{c} + \frac{7}{d} =$
- $\frac{a}{b} + \frac{b}{a} =$ $\frac{x}{2} + \frac{y}{5} =$ $\frac{a}{4} + \frac{a}{5} =$
- $\frac{(a+b)}{2a} - \frac{2a}{5} =$ $\frac{3}{2x} + \frac{(y+1)}{xy} =$ $\frac{2}{(y+1)} + 3 =$

ANSWERS :



Common Denominators

- | | | | |
|----|--|-------------------------------------|------------------------------------|
| 1. | $1/3 + 1/4 = 7/12$ | $1/2 + 1/3 = 5/6$ | $1/4 + 1/5 = 9/20$ |
| 2. | $2/7 + 4/5 = 38/35$ | $3/8 + 12/9 = 123/72$ | $4/5 + 3/2 = 23/10$ |
| 3. | $4/5 - 1/5 = 3/5$ | $4/7 - 1/3 = 5/21$ | $1/2 - 3/8 = 1/8$ |
| 4. | $7/9 + 3/5 - 2/3 = 32/45$ | $1/2 + 1/3 + 1/5 = 31/30$ | $2/5 + 2/3 - 5/8 = 53/120$ |
| 5. | $1/a + 1/b = (a + b)/ab$ | $2/x - 5/y = (2y - 5x)/xy$ | $3/c + 7/d = (3d + 7c)/cd$ |
| 6. | $a/b + b/a = (a^2 + b^2)/ab$ | $x/2 + y/5 = (5x + 2y)/10$ | $a/4 + a/5 = 9a/20$ |
| 7. | $(a + b)/2a - 2a/5 = (5a + 5b - 4a^2)/10a$ | $3/2x + (y + 1)/xy = (5y/2 + 1)/xy$ | $2/(y + 1) + 3 = (3y + 5)/(y + 1)$ |

KEY CONCEPTS:

Common Denominators:

1. Find common denominators when adding and subtracting fractions (not necessary for multiplication and division of fractions)
 - a. Multiply each numerator by the other fraction denominator and sum the results to get the new numerator value
 - b. Find the product of every denominator and use the value as the common denominator.
 - c. Express fraction result as n/d

2. Find common denominators to more than two fractions being added/subtracted.
 - a. Multiply each numerator by all the other fraction denominators and sum the results to get the new numerator value
 - b. Find the product of every denominator and use the value as the common denominator.
 - c. Express fraction result as n/d

3. Find common denominators for algebraic fractions in addition to numerals
 - a. Follow the procedure above, but use variables and expressions rather than numerical values.