

SM3-A PROPERTIES 4-1 (Add and Subtract Rational Expressions)

Identity Property of Multiplication The numeral “one” multiplied by any number does not change the “value” of the number (the product will have an “equivalent” value).

Used for: Obtaining Common Denominators:

$$\frac{2}{3} + \frac{3}{5} = \frac{3}{5} * \left(\frac{3}{3}\right) + \frac{2}{3} * \left(\frac{5}{5}\right) = \frac{10}{15} + \frac{9}{15} = \frac{19}{15}$$

Used for: Rationalizing Denominators: $\frac{2}{\sqrt{3}} * \left(\frac{\sqrt{3}}{\sqrt{3}}\right) = \frac{2\sqrt{3}}{3}$