

North Seattle Community College  
Mini Tutorials

- ❖ Click on a bookmarked heading on the left to access individual handouts.
- ❖ To print a handout, choose print and the page numbers indicated.
- ❖ Click on the link on the website to watch the movie and work the problems.

## Adding and Subtracting Fractions

When the denominators are the same:  $\frac{2}{5} + \frac{1}{5}$

When the denominators are different, find Lowest Common Denominator (LCD) and then add or subtract the numerators; there will be no change to the denominators. Simplify the fraction if possible.

$\frac{5}{6} + \frac{7}{9}$	$\frac{5}{8} - \frac{1}{3}$
$3\frac{3}{16} + 5\frac{1}{12}$	

Work these examples and then re-start the program to see the solutions:

$\frac{8}{9} - \frac{7}{15}$	$2\frac{4}{5} + 4\frac{1}{3}$
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## Multiplying Fractions

When multiplying or dividing fractions, a Lowest Common Denominator (LCD) is not needed.

$\frac{5}{12} \cdot \frac{7}{10}$	$\frac{14}{25} \cdot \frac{65}{48} \cdot \frac{15}{28}$
$3\frac{2}{3} \cdot 5\frac{1}{4}$	

Work these examples and then re-start the program to see the solutions:

$\frac{8}{9} \cdot \frac{15}{16}$	$2\frac{2}{5} \cdot 3\frac{1}{3}$
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## Dividing Fractions

When dividing fractions, flip (reciprocate) the fraction to the right of the division sign and then multiply.

$\frac{5}{8} \div \frac{3}{4}$	$9\frac{3}{5} \div 2\frac{1}{4}$
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Work these examples and then re-start the program to see the solutions:

$\frac{7}{12} \div \frac{5}{6}$	$4\frac{3}{8} \div 3\frac{3}{4}$
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## Multiplication with Exponents

In multiplication the exponents are added.

Examples:

$x^3 \cdot x^2$	$x^6 \cdot x^2$
$x^4 \cdot x^6$	$x^5 \cdot x^7$

Work these examples and then re-start the program to see the solutions:

$x^8 \cdot x^2$	$x^4 \cdot x^7$
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## Division with Exponents

In division the exponents are subtracted.

Examples:

$\frac{x^3}{x^2}$	$\frac{x^6}{x^4}$
$\frac{x^4}{x^8}$	$\frac{x^5}{x^7}$

Work these examples and then re-start the program to see the solutions:

$\frac{x^8}{x^2}$	$\frac{x^4}{x^7}$
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## Raising an Exponent to a Power

When raising an exponent to a power, the exponents are multiplied.

Examples:

$(x^3)^2$	$(x^6)^4$
$(x^4)^8$	$(x^5)^7$

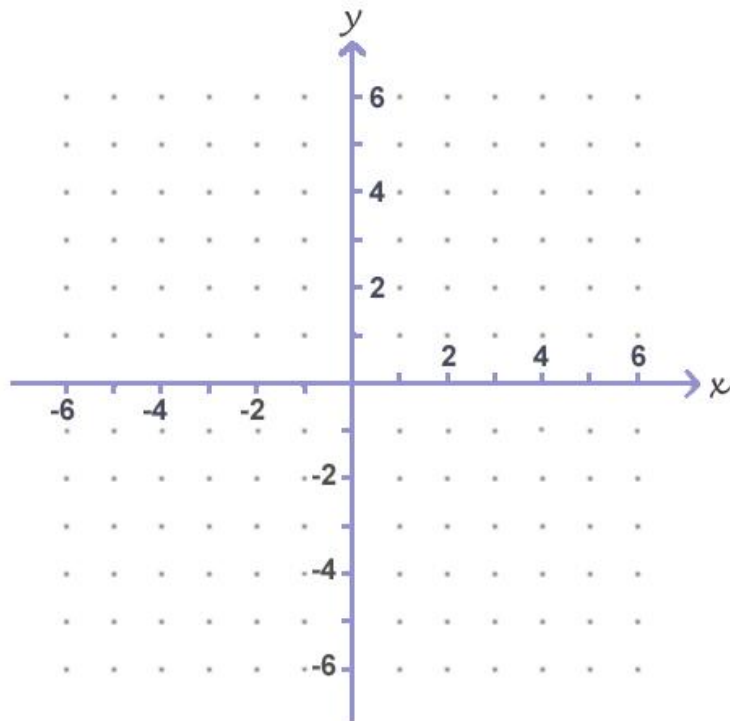
Work these examples and then re-start the program to see the solutions:

$(x^8)^2$	$(x^7)^3$
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# Graphing a Linear Equation in Standard Form

$$3x - 2y = 4$$

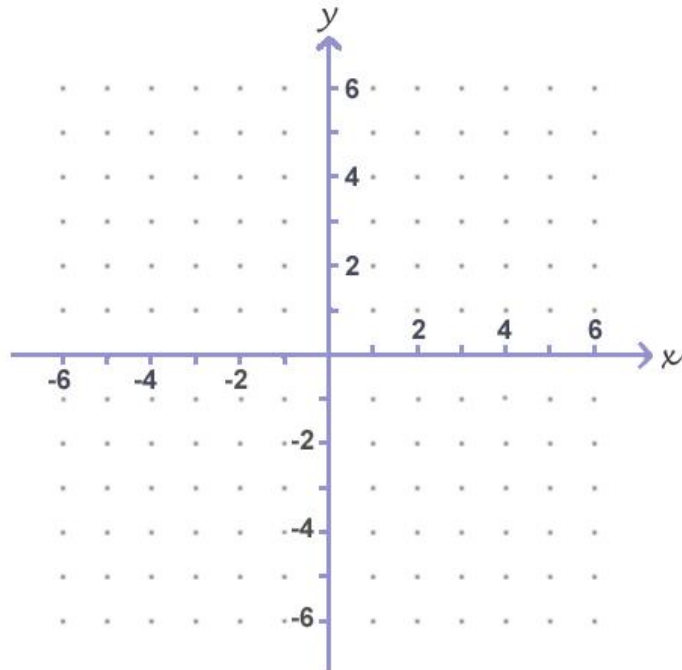
$x$	$3x - 2y = 4$	$y$



# Graphing a Linear Equation in Slope-Intercept Form

$$y = \frac{3}{5}x - 2$$

$x$	$y = \frac{3}{5}x - 2$	$y$



# Graphing a Linear Equation in Standard Form

$$2x + 5y = 6$$

$x$	$2x + 5y = 6$	$y$

