

# Algebra Practice

## Adding & Subtracting Polynomials

You can do your rough work on a separate paper, or use algebra tiles to help you in you like!

1) Add each set of polynomials. Simplify your answer. Choose an answer from the answer bank below and drag it to the correct box.

a)  $(2x + 1) + (3x + 8) =$  \_\_\_\_\_

b)  $(4x + 9) + (7x - 3) =$  \_\_\_\_\_

c)  $(2x - 6) + (-5x + 1) =$  \_\_\_\_\_

d)  $(4x^2 - 6x + 9) + (x^2 - 2) =$  \_\_\_\_\_

e)  $(x^2 - 2x + 1) + (3x^2 - 5x - 2) =$  \_\_\_\_\_

Answer bank \*\* Note there are more answers than questions \*

$5x^2 + 6x + 7$	$11x - 6$	$5x^2 - 6x + 7$
$5x^2 + 6x - 7$	$11x + 6$	$-3x - 5$
$4x^2 - 7x - 1$	$5x + 9$	$-3x - 5x$
$4x^2 - 8x$	$5x + 7$	$4x^2 + 3x - 1$

2) Subtract each set of polynomials. Simplify your answer.

a)  $(5x + 1) - (3x + 2) =$  \_\_\_\_\_

b)  $(7x + 9) - (4x - 1) =$  \_\_\_\_\_

c)  $(10 - 2x) - (-x + 1) =$  \_\_\_\_\_

d)  $(-3x^2 + 9) - (2x - x^2) =$  \_\_\_\_\_

e)  $(x^2 + 5x + 9) - (3x^2 + 4x + 1) =$  \_\_\_\_\_

Answer bank \*\* Note there are more answers than questions \*

$2x + 3$	$2x - 1$	$-x + 9$
$-2x^2 - 2x + 9$	$-x^2 + 10x$	$-x - 9$
$x^2 + 10$	$-2x^2 + x + 8$	$-2x^2 + 9x + 10$
$3x + 8$	$3x + 10$	$11x - 3$