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Problem Set 1

# **Problem Set 1**

Name: Your Name

Collaborators: Name1, Name2

### Problem 1-1.

(a)

$$(x+y)^{3} = (x+y)^{2}(x+y)$$

$$= (x^{2} + 2xy + y^{2})(x+y)$$

$$= (x^{3} + 2x^{2}y + xy^{2}) + (x^{2}y + 2xy^{2} + y^{3})$$

$$= x^{3} + 3x^{2}y + 3xy^{2} + y^{3}$$
(1)

- **(b)**
- **(c)**
- **(d)**

Problem Set 1

## Problem 1-2.

- (a)
- **(b)**

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## Problem 1-3.

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## Problem 1-4.

- (a)
- **(b)**
- **(c)**
- (d) Submit your implementation to alg.mit.edu.