

Algebraic Expressions

(answer sheet)

Simplify the following expressions.

1.) $5a + 6a = 11a$

2.) $3a + a = 4a$

3.) $8a - 3a = 5a$

4.) $10a - 2a = 8a$

5.) $9a + 4a = 13a$

6.) $11a - 7a = 4a$

7.) $4b + 3b = 7b$

8.) $12b - 6b = 6b$

9.) $5b + 9b = 14b$

Complete the following expressions.

1.) $12 \times 3 - 5 + 4 = 35$
 $36 - 5 + 4$
 $31 + 4$

2.) $4 + 7 \times 2 - 8 = 10$
 $4 + 14 - 8$
 $18 - 8$

3.) $5 - 7 + 2 \times 10 = 18$
 $5 - 7 + 20$
 $20 - 2$

4.) $15 \div 3 + 8 \times 5 = 45$
 $5 + 8 \times 5$
 $5 + 40$

5.) $11 \times 3 - 12 \div 4 = 30$
 $33 - 12 \div 4$
 $33 - 3$

6.) $5 + 9 - 16 \div 2 = 6$
 $5 + 9 - 8$
 $14 - 8$

Combine like terms to simplify the following expressions.

1.) $3a(a + 4) - 2a + 7 = 3a^2 + 10a + 7$
 $3a^2 + 12a - 2a + 7$

2.) $5a + 3a - 15 \div 3 = 8a - 5$
 $5a + 3a - 5$

3.) $4(3 + 9) + 10a - 4a = 48 + 6a$
 $4(12) + 10a - 4a$
 $48 + 10a - 4a$

4.) $(21 \div 7)(4a + a) - 12 = 15a - 12$
 $3(4a + a) - 12$
 $3(5a) - 12$

5.) $17 + 4(3 + a) - a = 29 + 3a$
 $17 + 12 + 4a - a$
 $29 + 4a - a$

6.) $10a - 4a + 27 \div 3 = 6a + 9$
 $10a - 4a + 9$