

R1. If the expression $2x + 3$ has a value of 7, what is the value of $4x + 6$?

R2. If the expression $15x + 12$ has a value of 18, what is the value of $5x + 4$?

R3. Simplify: $5(2m - 8) + 12$

R4. Simplify: $\frac{3(2x-4)}{3} + 5$

R5. Factor and check your work using the distributive property:

a. $10x - 6$

b. $7m - 21$

c. $12y + 8z$

d. $ax + 5x$

1. a) $x^2 - 2x$

b) $x^2 + 9x + 18$

c) $x^2 + 9x + 18$

d) $8x^2 + 12x$

e) $9x^2 - 6x - 8$

f) $x^2 - 9$

g) $6x^2 + 5x - 4$

h) $x^2 - 6x + 9$

i) $x^2 - 4x + 4$

2. (3)

3. a) $x^2 + 14x + 49$

b) $(3+7)^2 = (3)^2 + 14(3) + 49$

4. a) $x^2 + 7x - 8$

b) 22, 162

5. no

6. $a^2 + 2ab + b^2$

R1. 14

R2. 6

R3. $10m - 28$

R4. $2x + 1$

R5. a) $2(5x - 3)$

b) $7(m - 3)$

c) $4(3y + 2z)$

d) $x(a + 5)$