

Name: _____

Factors

1) Factorize the following, taking out as many factors as you can.

(1) $5a + 10b$

(2) $3a^2 + 2ab$

(3) $3a^2 - 6ab$

(4) $5xy + 8xz$

(5) $5xy - 10xz$

(6) $a^2 b + 3ab^2$

(7) $4pq^2 - 6p^2 q$

(8) $3x^2 y^3 + 5x^3 y^2$

(9) $4p^2 q + 2pq^2 - 6p^2 q^2$

(10) $2a^2 b^3 + 3a^3 b^2 - 6a^2 b^2$

2) Factorize the following expressions.

(1) $3x^2 + 2xy$

(2) $3pq + 6q^2$

(3) $5x^2 y - 7xy^2$

3) Factor the following expressions.

1) $xy - 5y$
 $x(x-4) - 5(x-4)$

2) $xy + 3y$
 $x(x+6) + 3(x+6)$

3) $3b + ab$
 $3(c+5) + a(c+5)$

4) $ap - cp$
 $a(b-2) - c(b-2)$

4) Factor the following expressions.

1) $3a(a+5)+4b(a+5)$

2) $4x(x-7)-3y(x-7)$

3) $2x(x+8)+(x+8)$

4) $3b(b-2)-(b-2)$

5) $(x-3)(x+5)+(x+2)(x+5)$

6) $(x-4)(x+1)+(x-4)(x-6)$

7) $(a-2)(4a-3)-(a+8)(a-2)$

8) $(3a-1)(2a-6)-(3a-1)(a+2)$

5) Carmen is installing hardwood floors in part of her house. Write an expression in factored form that represents the area that will be hardwood.

