

Worksheet

09/22/2019

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Problem quickname: 1595

1)

Expand the product as shown in example a).

Quick:
1595

- a) $(d + e)(a - b) = d(a - b) + e(a - b) = ad + ae - bd - be$
 b) $(d + b)(a - b) = d(a - b) + b(a - b) = ab + ad - b^2 - bd$
 c) $(e - 10)(a + b) = e(a + b) - 10(a + b) = ae - 10a + be - 10b$
 d) $(v + x)(v + 3) = v(v + 3) + x(v + 3) = v^2 + 3v + vx + 3x$
 e) $(e + b)(a - 10) = e(a - 10) + b(a - 10) = ab + ae - 10b - 10e$
 f) $(b + 19)(a + b) = b(a + b) + 19(a + b) = ab + 19a + b^2 + 19b$
 g) $(z - 21)(v + w) = z(v + w) - 21(v + w) = vz - 21v + wz - 21w$
 h) $(a + b)(a - b) = a(a - b) + b(a - b) = a^2 - b^2$
 i) $(c + d)(a - b) = c(a - b) + d(a - b) = ac + ad - bc - bd$
 j) $(v + z)(v - 36) = v(v - 36) + z(v - 36) = v^2 - 36v + vz - 36z$

2)

Expand the product as shown in example a).

Quick:
1595

- a) $(x - z)(v + w) = x(v + w) - z(v + w) = vx - vz + wx - wz$
 b) $(d + b)(a - b) = d(a - b) + b(a - b) = ab + ad - b^2 - bd$
 c) $(e + b)(a - b) = e(a - b) + b(a - b) = ab + ae - b^2 - be$
 d) $(y - v)(v - w) = y(v - w) - v(v - w) = -v^2 + vw + vy - wy$
 e) $(y - 5)(v - w) = y(v - w) - 5(v - w) = vy - 5v - wy + 5w$
 f) $(b + d)(a - b) = b(a - b) + d(a - b) = ab + ad - b^2 - bd$
 g) $(w - x)(v + w) = w(v + w) - x(v + w) = vw - vx + w^2 - wx$
 h) $(x + y)(v - w) = x(v - w) + y(v - w) = vx + vy - wx - wy$
 i) $(w - 2)(v - w) = w(v - w) - 2(v - w) = vw - 2v - w^2 + 2w$
 j) $(x - v)(v + w) = x(v + w) - v(v + w) = -v^2 - vw + vx + wx$

3)

Expand the product as shown in example a).

Quick:
1595

- a) $(w + y)(z + x) = w(z + x) + y(z + x) = wx + wz + xy + yz$
 b) $(y + v)(w + 12) = y(w + 12) + v(w + 12) = vw + 12v + wy + 12y$
 c) $(v + x)(z + w) = v(z + w) + x(z + w) = vw + vz + wx + xz$
 d) $(x + v)(w + z) = x(w + z) + v(w + z) = vw + vz + wx + xz$
 e) $(b + d)(c + a) = b(c + a) + d(c + a) = ab + ad + bc + cd$
 f) $(c + d)(a + e) = c(a + e) + d(a + e) = ac + ad + ce + de$
 g) $(b + e)(a + 13) = b(a + 13) + e(a + 13) = ab + ae + 13b + 13e$
 h) $(y + 13)(z + 16) = y(z + 16) + 13(z + 16) = yz + 16y + 13z + 208$

i) $(c + d)(a + 3) = c(a + 3) + d(a + 3) = ac + ad + 3c + 3d$

j) $(d + 10)(e + c) = d(e + c) + 10(e + c) = cd + 10c + de + 10e$

4)

Expand the product as shown in example a).

Quick:
1595

a) $(e + a)(d - b) = e(d - b) + a(d - b) = -ab + ad - be + de$

b) $(c + e)(b - a) = c(b - a) + e(b - a) = -ac - ae + bc + be$

c) $(e + c)(a - b) = e(a - b) + c(a - b) = ac + ae - bc - be$

d) $(d + c)(e - b) = d(e - b) + c(e - b) = -bc - bd + ce + de$

e) $(a + e)(c + b) = a(c + b) + e(c + b) = ab + ac + be + ce$

f) $(b + d)(a - e) = b(a - e) + d(a - e) = ab + ad - be - de$

g) $(d + c)(a - b) = d(a - b) + c(a - b) = ac + ad - bc - bd$

h) $(c - e)(d + b) = c(d + b) - e(d + b) = bc - be + cd - de$

i) $(x + y)(z - w) = x(z - w) + y(z - w) = -wx - wy + xz + yz$

j) $(x + z)(v + y) = x(v + y) + z(v + y) = vx + vz + xy + yz$

Good Luck!