

Difference of Two Squares Worksheet

Good

1) Factorise the algebraic expressions by filling in the gaps in the brackets.

a) $t^2 - g^2 = (t + \quad)(t - \quad)$ b) $m^2 - k^2 = (m + \quad)(m - \quad)$

c) $j^2 - p^2 = (j - p)(j + p)$ d) $f^2 - w^2 = (f + \quad)(\quad - w)$

e) $h^2 - b^2 = (h - \quad)(h + \quad)$ f) $q^2 - v^2 = (\quad - v)(\quad + v)$

g) $z^2 - y^2 = (\quad + \quad)(\quad - \quad)$

2) Factorise the following expressions.

a) $p^2 - n^2$ b) $d^2 - k^2$ c) $i^2 - m^2$ d) $g^2 - h^2$

e) $w^2 - 3^2$ f) $h^2 - 7^2$ g) $t^2 - 6^2$ h) $4^2 - g^2$

Great

1) Write these expressions in the form $a^2 - b^2$ and then factorise them.

a) $q^2 - 16 = q^2 - 4^2 = (\quad + 4)(\quad - 4)$ b) $g^2 - 36 = g^2 - 6^2 = (g + \quad)(g - \quad)$

c) $h^2 - 100 = \quad^2 - 10^2$ d) $j^2 - 4 = j^2 - \quad^2$

e) $b^2 - 49$ f) $m^2 - 81$

2) Factorise the following expressions.

a) $f^2 - 1$ b) $k^2 - 9$ c) $t^2 - 121$ d) $x^2 - 25$ e) $r^2 - 144$

Even Better

1) Write these expressions in the form $a^2 - b^2$ and then factorise them.

a) $9q^2 - 16 = (3q)^2 - 4^2 = (\quad + \quad)(\quad - \quad)$

b) $4g^2 - 36 = (2g)^2 - 6^2 = (\quad + 6)(\quad - 6)$

c) $16h^2 - 100 = (4h)^2 - \quad^2$

d) $25j^2 - 4 = \quad^2 - 2^2$

e) $9b^2 - 49$ f) $4m^2 - 81$ g) $16y^2 - 81$ h) $4j^2 - 9$ i) $100g^2 - 49$