

Year 11 Algebra Worksheet



Factorize following expressions:

1. $16x^2 - 1$
2. $3x^2 + 4x - 7$
3. $ax + ay - cx - cy$
4. $x^2 - y^2 + 2x - 2y$
5. If $8x + 6y = -4$ and $x + 2 = 0$, what is the value of y ?
6. If $3x + 5y = 10$ and $5x + 3y = 30$, what is the average (arithmetic mean) of x and y ?
7. Evaluate $y(1 - y^2)/(y - y^2)$
8. If $x - 4 = 9$, what is the value of $x^2 - 4$?
9. x is inversely proportion to y and $y = 1/3$ when $x = 6$. Find y when $x = 8$.
10. If $x = 1 + 3a$, $y = 4a - 5$, what will be value of "a" for $x = y$?
11. If $(5 - x)/(4 + x) = x$, what is the value of $x^2 + 5x - 5$?
12. If $(-7)(3/x + 9) = 0$ and $x \neq 7$, then $x = ?$