Kaboodle

Class 8 Maths Worksheet
Algebraic Expressions & Identities
Topic: Identitites

Name:

Date:

Find the value of x, if:

1. $4x = (52)^2 - (48)^2$

2. $14x = (47)^2 - (33)^2$

3. $5x = (50)^2 - (40)^2$

Find the values of the following expressions:

4. $16x^2 + 24x + 9$ when $x = 7/4$

5. $64x^2 + 81y^2 + 144xy$ when $x = 11$ and $y = 4/3$

6. $81x^2 + 16y^2 - 72xy$ when $x = 2/3$ and $y = 3/4$

7. If $x^2 + y^2 = 29$ and $xy = 2$, find the value of $x^4 + y^4$

Simplify:

8. $(x - y)(x + y)(x^2 + y^2)(x^4 + y^4)$

9. $(2x - 1)(2x + 1)(4x^2 + 1)(16x^4 + 1)$

10. $(7x - 8y)^2 + (7x + 8y)^2$

| $256x^8 - 1$ | $x^8 - y^8$ | $98x^2 + 128y^2$ |