

A.SSE.A.2: Factoring the Difference of Perfect Squares 1b

- 1 The expression $x^2 - 16$ is equivalent to
- 2 Which expression is equivalent to $64 - x^2$?
- 3 Which expression is equivalent to $121 - x^2$?
- 4 One of the factors of $4x^2 - 9$ is
 - 1) $(x + 3)$
 - 2) $(2x + 3)$
 - 3) $(4x - 3)$
 - 4) $(x - 3)$
- 5 The expression $9x^2 - 100$ is equivalent to
- 6 Which expression is equivalent to $9x^2 - 16$?
- 7 The expression $49x^2 - 36$ is equivalent to
- 8 The expression $100n^2 - 1$ is equivalent to
- 9 Factor completely: $3x^2 - 27$
- 10 Written in simplest factored form, the binomial $2x^2 - 50$ can be expressed as
- 11 Which expression is equivalent to $36x^2 - 100$?
- 12 Which expression is equivalent to $16x^2 - 36$?
- 13 Which expression is equivalent to $81 - 16x^2$?
- 14 When $9x^2 - 100$ is factored, it is equivalent to $(3x - b)(3x + b)$. What is a value for b ?
- 15 What is a common factor of $x^2 - 9$ and $x^2 - 5x + 6$?
- 16 Factor: $x^2 - 36$
- 17 Factor: $9 - x^2$
- 18 Factor: $16x^2 - 9$
- 19 Factor: $9x^2 - \frac{4}{9}$
- 20 Factor: $3a^2 - 3$
- 21 Factor completely: $5n^2 - 80$

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Answer Section

1 ANS:

$$(x + 4)(x - 4)$$

REF: fall0706ia

2 ANS:

$$(8 - x)(8 + x)$$

REF: 011201ia

3 ANS:

$$(11 - x)(11 + x)$$

REF: 081008ia

4 ANS: 2

REF: 010105a

5 ANS:

$$(3x - 10)(3x + 10)$$

REF: 010909ia

6 ANS:

$$(3x + 4)(3x - 4)$$

REF: 080902ia

7 ANS:

$$(7x - 6)(7x + 6)$$

REF: 081703ai

8 ANS:

$$(10n + 1)(10n - 1)$$

REF: 011306ia

9 ANS:

$$3(x + 3)(x - 3)$$

$$3x^2 - 27 = 3(x^2 - 9) = 3(x + 3)(x - 3)$$

REF: 060109a

10 ANS:

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

$$2x^2 - 50 = 2(x^2 - 25) = 2(x + 5)(x - 5)$$

REF: 080103a

11 ANS:

$$4(3x + 5)(3x - 5)$$

$$36x^2 - 100 = 4(9x^2 - 25) = 4(3x + 5)(3x - 5)$$

REF: 081608ai

12 ANS:

$$4(2x + 3)(2x - 3)$$

$$16x^2 - 36 = 4(2x + 3)(2x - 3)$$

REF: 011701ai

13 ANS:

$$(9 - 4x)(9 + 4x)$$

REF: 061506ia

14 ANS:

$$10$$

REF: 081403ia

15 ANS:

$$x - 3$$

REF: 010414a

16 ANS:

$$(x + 6)(x - 6)$$

REF: 019604al

17 ANS:

$$-(x + 3)(x - 3)$$

REF: 119404al

18 ANS:

$$(4x + 3)(4x - 3)$$

REF: 039404al

19 ANS:

$$\left(3x + \frac{2}{3}\right)\left(3x - \frac{2}{3}\right)$$

REF: 089703al

20 ANS:

$$3(a + 1)(a - 1)$$

REF: 030501al

21 ANS:

$$5(n + 4)(n - 4). \quad 5n^2 - 80 = 5(n^2 - 16) = 5(n + 4)(n - 4)$$

REF: 080533a