

Factoring Completely

Factor each completely.

1) $5x^2 - 20$

- A) $(x + 2)^2$
- B) $5(5x + 4)^2$
- C) $5(x + 2)(x - 2)$
- D) $25(x - 2)^2$

2) $2x^2 - 50$

- A) $2(x + 25)^2$
- B) $(x - 5)^2$
- C) $4(x - 5)^2$
- D) $2(x + 5)(x - 5)$

3) $32p^2 - 2$

- A) $2(-4p + 1)(4p - 1)$
- B) $2(4p + 1)(4p - 1)$
- C) Not factorable
- D) $2(2p + 5)(2p - 5)$

4) $3x^2 - 75$

- A) $3(x + 5)(x - 5)$
- B) $3(x + 25)^2$
- C) $(x - 5)^2$
- D) $3(x + 4)^2$

5) $20n^2 - 125$

- A) $5(2n + 5)(2n - 5)$
- B) Not factorable
- C) $(2n - 5)^2$
- D) $5(4n + 25)^2$

6) $5r^2 - 5$

- A) $5(3r - 5)^2$
- B) $5(r + 1)^2$
- C) $5(3r + 4)(3r - 4)$
- D) $5(r + 1)(r - 1)$

7) $32k^2 - 50$

- A) $2(4k + 5)(4k - 5)$
- B) $2(4k - 3)^2$
- C) $(4k - 5)^2$
- D) $2(k - 1)^2$

8) $16n^2 - 36$

- A) $(2n - 3)^2$
- B) $4(2n + 3)(2n - 3)$
- C) $4(2n - 3)^2$
- D) $4(4n + 1)(4n - 1)$

9) $75a^2 - 12b^2$

- A) $3(3a + b)(3a - b)$
- B) $3(3a + 4b)(3a - 4b)$
- C) $3(5a + 2b)(5a - 2b)$
- D) $3(2a + b)(2a - b)$

10) $12u^2 - 75v^2$

- A) $9(2u - 5v)^2$
- B) $(2u - 5v)^2$
- C) $3(2u + 5v)(2u - 5v)$
- D) $3(4u + 5v)(4u - 5v)$

Answers to

1) C
5) A
9) C

2) D
6) D
10) C

3) B
7) A

4) A
8) B