

Polynomial Multiplicaiton

Date _____ Period _____

Find each product.

1) $6n(6n + 3)$

- A) $15n^3 - 35n^2$ (Yellow)
- B) $8n + 10$ (Red)
- C) $36n^2 + 18n$ (Black)
- D) $28n - 4$ (Purple)

2) $8(6x - 2)$

- A) $48x - 16$ (Red)
- B) $25x^2 + 25x$ (White)
- C) $16x^3 - 16x^2$ (Yellow)
- D) $25x - 35$ (Black)

3) $7(6m - 2)$

- A) $42m - 14$ (Yellow)
- B) $3m^2 - 18m$ (Silver)
- C) $56m + 8$ (Green)
- D) $56m^2 - 40m$ (White)

4) $(4a - 1)(-7a + 4)$

- A) $-28a^2 + 9a + 4$ (White)
- B) $-28a^2 - 9a + 4$ (Orange)
- C) $-28a^2 + 23a - 4$ (Green)
- D) $-28a^2 - 4$ (Red)

5) $(-5n + 6)(-2n - 3)$

- A) $10n^2 + 27n + 18$ (White)
- B) $10n^2 - 18$ (Pink)
- C) $10n^2 + 3n - 18$ (Red)
- D) $10n^2 - 27n + 18$ (Yellow)

6) $(3a + 6)(-8a + 8)$

- A) $-24a^2 + 72a - 48$ (Black)
- B) $-24a^2 - 72a - 48$ (Red)
- C) $-24a^2 - 24a + 48$ (Brown)
- D) $-24a^2 + 48$ (Purple)

7) $(-6r + 1)(-r + 3)$

- A) $-7r^2 - 25r + 12$ (Orange)
- B) $-7r^2 - 31r - 12$ (Green)
- C) $6r^2 - 19r + 3$ (Red)
- D) $6r^2 - 17r - 3$ (Yellow)

8) $(8n + 5)(-2n + 1)$

- A) $20n^2 - 60n + 40$ (Yellow)
- B) $20n^2 + 20n - 40$ (Red)
- C) $-16n^2 - 2n + 5$ (Silver/grey)
- D) $20n^2 + 40$ (Green)

9) $(-3k - 3)(5k^2 + 3k - 7)$

- A) $-49k^3 + 56k^2 + 41k - 40$ (Purple)
- B) $-2k^3 - 22k^2 - 54k - 18$ (Orange)
- C) $4k^3 - 9k^2 - 3k + 10$ (Green)
- D) $-15k^3 - 24k^2 + 12k + 21$ (Red)

10) $(-3k - 8)(8k^2 + 7k + 1)$

- A) $24k^3 + 50k^2 + 46k + 56$ (Brown)
- B) $-24k^3 - 85k^2 - 59k - 8$ (Green)
- C) $18k^3 + 3k^2 - 13k + 2$ (Yellow)
- D) $8k^3 - 14k^2 + 22k - 16$ (Red)

11) $(-4n + 3)(-5n^2 - 2n + 3)$

- A) $-28n^3 - 60n^2 + 24n + 64$ (Black)
- B) $16n^3 - 34n^2 + 23n - 5$ (Orange)
- C) $20n^3 - 7n^2 - 18n + 9$ (Brown)
- D) $42n^3 - 59n^2 + 48n - 16$ (Green)

12) $(-3b - 1)(-3b^2 - 3b - 1)$

- A) $15b^3 + 7b^2 - 14b - 8$ (Black)
- B) $-16b^3 - 20b^2 - 30b - 12$ (Green)
- C) $-9b^3 - 18b^2 - 17b - 56$ (Purple)
- D) $9b^3 + 12b^2 + 6b + 1$ (Light Brown/Tan)

13) $(-4r + 8)(8r^2 + 6r - 4)$

- A) $-32r^3 + 40r^2 + 64r - 32$ (Black)
- B) $8r^3 + 62r^2 + 37r - 35$ (Grey)
- C) $20r^3 - 59r^2 + 62r - 24$ (Green)
- D) $-7r^3 - 31r^2 - 13r - 4$ (Brown)

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