

1. Divide  $3x^3 + 3x - 3$  by  $x - 2$ .

[A]  $3x^2 + 9x + 15 + \frac{30}{x-2}$

[B]  $3x^2 + 9x - 18 - \frac{39}{x-2}$

[C]  $3x^2 + 6x - 9 - \frac{18}{x-2}$

[D]  $3x^2 + 6x + 15 + \frac{27}{x-2}$

2. Divide  $2x^3 - 2x + 6$  by  $x + 3$ .

[A]  $2x^2 - 6x - 20 + \frac{64}{x+3}$

[B]  $2x^2 - 8x + 30 - \frac{90}{x+3}$

[C]  $2x^2 - 6x + 16 - \frac{42}{x+3}$

[D]  $2x^2 - 8x - 24 + \frac{78}{x+3}$

3. Divide  $3x^3 + x - 4$  by  $x + 2$ .

[A]  $3x^2 - 6x - 11 + \frac{19}{x+2}$

[B]  $3x^2 - 5x + 6 - \frac{12}{x+2}$

[C]  $3x^2 - 6x + 13 - \frac{30}{x+2}$

[D]  $3x^2 - 5x - 10 + \frac{16}{x+2}$

4. Divide  $2x^3 - 5x + 7$  by  $x - 3$ .

[A]  $2x^2 + x + 10 + \frac{30}{x-3}$

[B]  $2x^2 + 6x + 13 + \frac{46}{x-3}$

[C]  $2x^2 + 6x - 23 - \frac{67}{x-3}$

[D]  $2x^2 + x - 3 - \frac{2}{x-3}$

5. Divide  $2x^3 + x - 5$  by  $x - 2$ .

[A]  $2x^2 + 5x + 5 + \frac{10}{x-2}$

[B]  $2x^2 + 4x - 7 - \frac{18}{x-2}$

[C]  $2x^2 + 5x - 10 - \frac{25}{x-2}$

[D]  $2x^2 + 4x + 9 + \frac{13}{x-2}$

6. Divide  $-3x^3 + 2x - 9$  by  $x - 3$ .

[A]  $-3x^2 - 7x - 30 - \frac{90}{x-3}$

[B]  $-3x^2 - 9x - 25 - \frac{84}{x-3}$

[C]  $-3x^2 - 7x + 21 + \frac{54}{x-3}$

[D]  $-3x^2 - 9x + 29 + \frac{80}{x-3}$

7. Divide  $-2x^3 + 2x + 9$  by  $x - 3$ .

[A]  $-2x^2 - 4x + 12 + \frac{45}{x-3}$

[B]  $-2x^2 - 4x - 3 - \frac{9}{x-3}$

[C]  $-2x^2 - 6x - 16 - \frac{39}{x-3}$

[D]  $-2x^2 - 6x + 20 + \frac{71}{x-3}$

8. Divide  $x^3 + 3x - 1$  by  $x + 2$ .

[A]  $x^2 + x - 3 + \frac{6}{x+2}$  [B]  $x^2 + x + 2 - \frac{5}{x+2}$  [C]  $x^2 - 2x - 1 + \frac{4}{x+2}$  [D]  $x^2 - 2x + 7 - \frac{15}{x+2}$

9. Divide  $x^3 - x + 8$  by  $x - 3$ .

[A]  $x^2 + 3x - 10 - \frac{23}{x-3}$

[B]  $x^2 + 2x - 6 - \frac{10}{x-3}$

[C]  $x^2 + 3x + 8 + \frac{32}{x-3}$

[D]  $x^2 + 2x + 14 + \frac{42}{x-3}$

10. Compare the quantity in Column A with the quantity in Column B.

the quotient of  $(x^3 + x^2 + 7x + 26) \div (x - 2)$

Column A

Column B

the coefficient of the  $x^2$  term      the constant term

[A] The quantity in Column A is greater.

[B] The quantity in Column B is greater.

[C] The two quantities are equal.

[D] The relationship cannot be determined on the basis of the information supplied.

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[1] D

[2] C

[3] C

[4] B

[5] D

[6] B

[7] C

[8] D

[9] C

[10] B