|  |  |  |
| --- | --- | --- |
| **1.a** | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {3x - b} \right)\sqrt {\frac{{x + a}}{{4{x^3} + x - 7}}} \]=? với b > 0 |  |
| 2.A | -3 |  |
| 2.B | \[ - \frac{3}{2}\] |  |
| 2.C | \[ - \frac{{b\sqrt a }}{2}\] |  |
| 2.D | \[ - \frac{{\sqrt a }}{2}\] |  |
| 3.Đáp án | B |  |
| 4.Đáp án chi tiết | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {3x - b} \right)\sqrt {\frac{{x + a}}{{4{x^3} + x - 7}}} \]\[ = \mathop {\lim }\limits\_{x \to - \infty } - \sqrt {\frac{{\left( {x + a} \right){{\left( {3x - b} \right)}^2}}}{{4{x^3} + x - 7}}} = \mathop {\lim }\limits\_{x \to - \infty } - \sqrt {\frac{{\left( {1 + \frac{a}{x}} \right){{\left( {3 - \frac{b}{x}} \right)}^2}}}{{4 + \frac{1}{{{x^2}}} - \frac{7}{{{x^3}}}}}} = - \frac{3}{2}\] |  |
| 5.Level |  |  |
| 6.Ghi chú |  |  |
| **1.b** | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {\sqrt {4{x^2} - {a^2}x} + 2x} \right)\]=? |  |
| 2.A | 0 |  |
| 2.B | \[ + \infty \] |  |
| 2.C | a+2 |  |
| 2.D | \[\frac{{{a^2}}}{4}\] |  |
| 3.Đáp án | D |  |
| 4.Đáp án chi tiết | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {\sqrt {4{x^2} - {a^2}x} + 2x} \right) = \mathop {\lim }\limits\_{x \to - \infty } \left( {\frac{{ - {a^2}x}}{{\sqrt {4{x^2} - {a^2}x} - 2x}}} \right) = \mathop {\lim }\limits\_{x \to - \infty } \left( {\frac{{ - {a^2}}}{{ - \sqrt {4 - \frac{{{a^2}}}{x}} - 2}}} \right) = \frac{{{a^2}}}{4}\] |  |
| 5.Level |  |  |
| 6.Ghi chú |  |  |
| **1.c** | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {\frac{{ax + \sqrt {4{x^2} - x + 1} }}{{1 - bx}}} \right)\]=? (a < 0) |  |
| 2.A | \[\frac{{2 - a}}{b}\] |  |
| 2.B | \[\frac{{a + 2}}{{ - b}}\] |  |
| 2.C | \[\frac{{ - a}}{b}\] |  |
| 2.D | \[\frac{{ - b}}{a}\] |  |
| 3.Đáp án | A |  |
| 4.Đáp án chi tiết | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {\frac{{ax + \sqrt {4{x^2} - x + 1} }}{{1 - bx}}} \right) = \mathop {\lim }\limits\_{x \to - \infty } \left( {\frac{{a - \sqrt {4 - \frac{1}{x} + \frac{1}{{{x^2}}}} }}{{\frac{1}{x} - b}}} \right) = \frac{{2 - a}}{b}\] |  |
| 5.Level |  |  |
| 6.Ghi chú |  |  |
| **1.d** | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {3x - 1} \right)\sqrt {\frac{{{x^3} + a}}{{3b{x^5} - a}}} \]=?, b > 0 |  |
| 2.A | \[ - \sqrt {\frac{3}{b}} \] |  |
| 2.B | \[ - \infty \] |  |
| 2.C | \[\sqrt {\frac{1}{{3b}}} \] |  |
| 2.D | -1 |  |
| 3.Đáp án | A |  |
| 4.Đáp án chi tiết | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {3x - 1} \right)\sqrt {\frac{{{x^3} + a}}{{3b{x^5} - a}}} = \mathop {\lim }\limits\_{x \to - \infty } - \sqrt {\frac{{\left( {{x^3} + a} \right){{\left( {3x - 1} \right)}^2}}}{{3b{x^5} - a}}} = \mathop {\lim }\limits\_{x \to - \infty } - \sqrt {\frac{{\left( {1 + \frac{a}{{{x^3}}}} \right){{\left( {3 - \frac{1}{x}} \right)}^2}}}{{3b - \frac{a}{{{x^5}}}}}} = - \sqrt {\frac{3}{b}} \] |  |
| 5.Level |  |  |
| 6.Ghi chú |  |  |
| **1.e** | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {\frac{{{{\left( {x - a} \right)}^2}{{\left( {2 - x} \right)}^5}}}{{{{\left( {bx + 1} \right)}^3}{{\left( {1 - x} \right)}^4}}}} \right)\]=? |  |
| 2.A | \[\frac{{32{a^2}}}{{{b^3}}}\] |  |
| 2.B | \[\frac{{32}}{b}\] |  |
| 2.C | \[\frac{{ - 1}}{{{b^3}}}\] |  |
| 2.D | \[\frac{{ - 2a}}{b}\] |  |
| 3.Đáp án | C |  |
| 4.Đáp án chi tiết | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {\frac{{{{\left( {x - a} \right)}^2}{{\left( {2 - x} \right)}^5}}}{{{{\left( {bx + 1} \right)}^3}{{\left( {1 - x} \right)}^4}}}} \right) = \mathop {\lim }\limits\_{x \to - \infty } \left( {\frac{{{{\left( {1 - \frac{a}{x}} \right)}^2}{{\left( {\frac{2}{x} - 1} \right)}^5}}}{{{{\left( {b + \frac{1}{x}} \right)}^3}{{\left( {\frac{1}{x} - 1} \right)}^4}}}} \right) = \frac{{ - 1}}{{{b^3}}}\] |  |
| 5.Level |  |  |
| 6.Ghi chú |  |  |
| **1.f** | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {\frac{{4{x^7} - ax - 3}}{{ax - b{x^7}}}} \right)\]=? |  |
| 2.A | -1 |  |
| 2.B | \[\frac{{ - 4}}{b}\] |  |
| 2.C | \[\frac{4}{a}\] |  |
| 2.D | \[\frac{a}{b}\] |  |
| 3.Đáp án | B |  |
| 4.Đáp án chi tiết | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {\frac{{4{x^7} - ax - 3}}{{ax - b{x^7}}}} \right) = \mathop {\lim }\limits\_{x \to - \infty } \frac{{{x^7}\left( {4 - \frac{a}{{{x^6}}} - \frac{3}{{{x^7}}}} \right)}}{{{x^7}\left( {\frac{a}{{{x^6}}} - b} \right)}} = \mathop {\lim }\limits\_{x \to - \infty } \frac{{4 - \frac{a}{{{x^6}}} - \frac{3}{{{x^7}}}}}{{\frac{a}{{{x^6}}} - b}} = \frac{{ - 4}}{b}\] |  |
| 5.Level |  |  |
| 6.Ghi chú |  |  |
| **1.g** | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {\frac{{\sqrt {a{x^2} + bx - b} }}{{3b - 2x}}} \right)\]=?, a>0 |  |
| 2.A | \[\frac{{\sqrt b }}{2}\] |  |
| 2.B | \[\frac{{\sqrt a }}{2}\] |  |
| 2.C | \[\frac{{ - 1}}{3}\] |  |
| 2.D | \[\frac{1}{3}\] |  |
| 3.Đáp án | B |  |
| 4.Đáp án chi tiết | \[\mathop {\lim }\limits\_{x \to - \infty } \left( {\frac{{\sqrt {a{x^2} + bx - b} }}{{3b - 2x}}} \right) = \mathop {\lim }\limits\_{x \to - \infty } \left( {\frac{{ - \sqrt {a + \frac{b}{x} - \frac{b}{{{x^2}}}} }}{{\frac{{3b}}{x} - 2}}} \right) = \frac{{\sqrt a }}{2}\] |  |
| 5.Level |  |  |
| 6.Ghi chú |  |  |
| **1.h** |  |  |
| 2.A |  |  |
| 2.B |  |  |
| 2.C |  |  |
| 2.D |  |  |
| 3.Đáp án |  |  |
| 4.Đáp án chi tiết |  |  |
| 5.Level |  |  |
| 6.Ghi chú |  |  |
| **1.i** |  |  |
| 2.A |  |  |
| 2.B |  |  |
| 2.C |  |  |
| 2.D |  |  |
| 3.Đáp án |  |  |
| 4.Đáp án chi tiết |  |  |
| 5.Level |  |  |
| 6.Ghi chú |  |  |
| **1.j** |  |  |
| 2.A |  |  |
| 2.B |  |  |
| 2.C |  |  |
| 2.D |  |  |
| 3.Đáp án |  |  |
| 4.Đáp án chi tiết |  |  |
| 5.Level |  |  |
| 6.Ghi chú |  |  |