**Тест по математике 7 класс /апрель 2018 г./**

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| Школа\_\_\_класс\_\_\_Фамилия, имя\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (печатными буквами) | КОД\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  |
| Вариант 1 | КОД\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Часть 1 (в заданиях с выбором ответа поставьте знак «x») | |
| ***1. Найдите значение числового выражения:***  А. - 4 Б. – 3 В. 4 Г. 3 | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***2. Решите уравнение: 5y + 1,5 = 2y – 7,5.***  А . 6,375 Б. 3 В. – 3 Г. 4 | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***3. Найдите значение выражения: 5x -7y, при***  А. Б. В. Г. | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***4. Функция у =kx + b задана графиком. Выберите верное утверждение.***  А. k > 0, b > 0.  Б. k > 0, b < 0.  B. k < 0, b > 0.  Г. k < 0, b < 0. | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***5. Выполните умножение и приведите подобные слагаемые:***  ***(х – 5y)(3y + 2x).***  А. 7xy Б. 2x – 7xy – 15y В. 2х2 - 13хy – 15y2 Г. 2х2 – 15y2 . | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***6. Преобразуйте в многочлен: (y - 7)2***  А. y2 – 72 . Б. y2 – 14y + 49 В . y2 + 14y + 49 Г. y2 – 7y - 49 . | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***7. Упростите выражение*: с7: с4⋅ с**  А. с5 Б. с6 В. с4 Г. с12 | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***8.******Один из смежных углов равен 200. Найдите другой угол.***  А. 700 Б. 200 В. 1600 Г. 1000 | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***9. Упростите выражение: (а - 5)(а + 5) + 25***  А. а2 - 25 Б. а2 В. 25 Г. а2 + 25 | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***10.******Разложите на множители выражение:* 12ab2- 3ac**  А. 3a(4b2 – с) Б. 3(4ab2 – 3a) В. 3a(b2 - c) Г. a (12b2 - c) | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| 2 часть (решение задач 2 части запишите подробно и разборчиво) | |
| ***11. Разложите на множители: 2x2 – 3x + 4ax – 6a***   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Ответ: | | | | | | | | | | | | |
| ***12. Решите задачу. «Скорость мотоциклиста на 20 км/ч меньше скорости автомобиля. Они двигаются навстречу друг другу и вместе проехали 420 км. Автомобиль был в пути 3 ч, мотоциклист 2ч. Найдите скорость мотоциклиста».***   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Ответ: | | | | | | | | | | | | |
| ***13. В треугольнике АВС ∠ А = 200, ∠ С = 800, СД – биссектриса угла С. Найдите∠ СДВ.***   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Ответ: | | | | | | | | | | | | |
| ***14. Решите уравнение:***   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Ответ: | | | | | | | | | | | | |
| ***15. Делится ли на 5 выражение (2х + 3)(3х - 7) – (х + 1)(х -1) при любом целом х .***   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Ответ: | | | | | | | | | | | | |
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**Тест по математике 7 класс /апрель 2018 г./**

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| Школа\_\_\_класс\_\_\_Фамилия, имя\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (печатными буквами) | КОД\_\_\_\_\_\_\_\_\_\_\_\_ |
|  |  |
| Вариант 2 | КОД\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Часть 1 (в заданиях с выбором ответа поставьте знак «x») | |
| ***1. Найдите значение числового выражения:***  А. - 6 Б. – 1,5 В. 6 Г. 1,5 | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***2. Решите уравнение: 7,5 – 2x = 5x – 6,5.***  А . 2 Б. -2 В. – 3 Г. 3 | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***3. Найдите значение выражения: 3a – 4b, при***  А.- 0,5 Б. 5 В. 0,5 Г. 3,5 | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***4. Функция у =kx + b задана графиком. Выберите верное утверждение.***  А. k > 0, b > 0.  Б. k > 0, b < 0.  B. k < 0, b > 0.  Г. k < 0, b < 0. | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***5. Выполните умножение и приведите подобные слагаемые:***  ***(3a - b)(2b – 4a).***  А. – 12a2 – 10ab – 2b2 Б. – 12a2 + 10ab – 2b2 В. 6ab – 2b2 Г. 6ab – 4b . | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***6. Преобразуйте в многочлен: (x - 8)2***  А. x2 – 64 . Б. x2 + 16x + 64 В . x2 - 16x + 64 Г. x2 - 8x + 64. | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***7. Упростите выражение*: b4: b3⋅ b2**  А. b5 Б. b6 В. b3 Г. b9 | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***8.******Один из смежных углов равен 600. Найдите другой угол.***  А. 600 Б. 1200 В. 2400 Г. 1000 | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***9. Упростите выражение: (x - 7)(x + 7) + 49***  А. x2 - 7 Б. x2 + 7 В. 7x2 Г. x2 | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| ***10.******Разложите на множители выражение:* 10xy2- 3xz2**  А. xyz(10y – 2z) Б. 3x(5y2 – z2) В. x(10y2 – 2z2) Г. 2x (5y2 – 2z2) | |  |  |  |  | | --- | --- | --- | --- | | А | Б | В | Г | |  |  |  |  | |
| 2 часть (решение задач 2 части запишите подробно и разборчиво) | |
| ***11. Разложите на множители: ay + 3ax – 12bx – 4by***   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Ответ: | | | | | | | | | | | | |
| ***12. Решите задачу. «Скорость автомобиля на 40 км/ч больше скорости мотоциклиста. Они двигаются навстречу друг другу и вместе проехали 380 км. Автомобиль был в пути 3 ч, мотоциклист 1ч. Найдите скорость мотоциклиста».***   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Ответ: | | | | | | | | | | | | |
| ***13. В треугольнике АВС ∠ А = 300, ∠ С = 600, СД – биссектриса угла С. Найдите∠ СДВ.***   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Ответ: | | | | | | | | | | | | |
| ***14. Решите уравнение:***   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Ответ: | | | | | | | | | | | | |
| ***15. Делится ли на 5 выражение (7х + 8)(х - 1) + (3х - 2)(х +2) при любом целом х .***   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Ответ: | | | | | | | | | | | | |
|  | |