**Городская олимпиада по математике**

**для учащихся 4 классов**

**2019 год**

**Код участника \_\_\_\_\_\_\_\_\_**

**1.** Внимательно посмотри, как построен каждый ряд чисел. Найди закономерность и продолжи последовательность ещё на 3 числа:

а) 22, 44, 66, …, …, …

б) 4, 5, 15, 16, 26, 27, …, …, …

в) 15, 14, 16, 13, 17, 12, …, …, …

г) 1, 3, 5 , … , …, …

д) 9, 10, 11, …, …, …

**2.** Напиши цифрами число, состоящее из 33 миллионов 33 тысяч 33 сотен и 33 единиц.

Ответ: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**3. Выбери и подчеркни запись величин, записанных в порядке убывания.**

а) 320 г; 320 кг; 320 ц; 320 т

б) 10 сут; 10 ч; 10 с; 10 мин

в) 48 км; 48 м; 48 см; 48 мм

**4.** **Реши задачу по действиям с пояснениями. Вычисли и запиши ответ.**

На олимпиаде три команды набрали 285 баллов. При условии, что команд 24-ой школы набрала бы меньше на 8 баллов, команда 46-ой школы на 12 баллов меньше, а команда школы номер 12 на 7 баллов меньше, тогда все команды набрали бы баллов поровну. Какое количество баллов набрали команды 12-ой и 24-ой школ вместе?

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**5. Реши задачу. Можешь воспользоваться таблицей.**

Развернул Иван-царевич свиток и прочёл: «Живут в логовище три Змея:

Одноглавый, Трёхглавый и Шестиглавый. Бей их нещадно мечом заветным,

но помни его волшебные свойства: если срубишь им 1 голову Змея, то вырастет одна голова, срубишь 1 хвост – вырастет 2 хвоста, срубишь 2 хвоста – вырастет одна голова, срубишь 2 головы – ничего не вырастет, а больше двух голов одним ударом срубить невозможно».

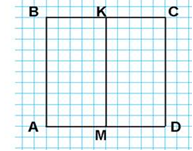
Победил Иван-царевич Одноглавого Змея тремя ударами, Трёхглавого Змея четырьмя ударами и смекнул, что всего три раза надо мечом махнуть, чтобы побить Шестиглавого Змея.

Какие четыре удара сделал Иван-царевич, чтобы победить Трёхглавого Змея?

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| № удара | Срубить | Станет |
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**6.** **Реши задачу с объяснением. Вычисли и запиши ответ.**

На листе бумаги нарисован большой квадрат АВСD. Точки К и М – середины сторон ВС и АD соответственно. По контуру квадрата с одинаковыми скоростями ползут две мухи. Одна проползла по маршруту А-В-С-D-А, а другая по маршруту А-В-К-М-А. Известно, что первая муха ползла на 5 минут дольше. Сколько времени ползла каждая муха?

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**7. Изобрази графически, как можно разделить круг, используя ровно три прямые линии.**

а) на 4 части; б) на 5 частей; в) на 6 частей; г) на 7 частей?

а) б)

в) г)

**8. Реши задачу по действиям с пояснениями. Вычисли и запиши ответ.**

Найдите периметр фигуры, составленной из одинаковых квадратиков, если её площадь равна 108 кв. см.



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