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| Для транспортировки 45 тонн груза на 1300 км можно воспользоваться услугами одной из трех фирм-перевозчиков. Стоимость перевозки и грузоподъемность автомобилей для каждого перевозчика указана в таблице. Сколько рублей придется заплатить за самую дешевую перевозку?

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| **Перевозчик**  | **Стоимость перевозки одним автомобилем (руб. на 100 км)**  | **Грузоподъемность автомобилей (тонн)**  |
| А  | 3200  | 3,5  |
| Б  | 4100  | 5  |
| В  | 9500  | 12  |

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| Интернет-провайдер (компания, оказывающая услуги по подключению к сети Интернет) предлагает три тарифных плана.

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| **Тарифный план**  | **Абонентская плата**  | **Плата за трафик**  |
| План "0"  | Нет  | 2,5 руб. за 1 Мб  |
| План "500"  | 550 руб. за 500 Мб трафика в месяц  | 2 руб. за 1 Мб сверх 500 Мб  |
| План "800"  | 700 руб. за 800 Мб трафика в месяц  | 1,5 руб. за 1 Мб сверх 800 Мб  |

Пользователь предполагает, что его трафик составит 600 Мб в месяц, и исходя из этого выбирает наиболее дешевый тарифный план. Сколько рублей заплатит пользователь за месяц, если его трафик действительно будет равен 600 Мб?  |

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| Для остекления музейных витрин требуется заказать 20 одинаковых стекол в одной из трех фирм. Площадь каждого стекла 0,25 {\textrm{м}^{2}}. В таблице приведены цены на стекло и на резку стекол. Сколько рублей будет стоить самый дешевый заказ?

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| **Фирма**  | **Цена стекла (руб. за 1 {\textrm{м}^{2}})**  | **Резка стекла (руб. за одно стекло)**  | **Дополнительные условия**  |
| A  | 300  | 17  |   |
| Б  | 320  | 13  |   |
| В  | 340  | 8  | При заказе на сумму больше 2500 руб. резка бесплатно.  |

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| Клиент хочет арендовать автомобиль на сутки для поездки протяженностью 500 км. В таблице приведены характеристики трех автомобилей и стоимость их аренды. Помимо аренды клиент обязан оплатить топливо для автомобиля на всю поездку. Какую сумму в рублях заплатит клиент за аренду и топливо, если выберет самый дешевый вариант?

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| **Автомобиль**  | **Топливо**  | **Расход топлива (л на 100 км)**  | **Арендная плата (руб. за 1 сутки)**  |
| А  | Дизельное  | 7  | 3700  |
| Б  | Бензин  | 10  | 3200  |
| В  | Газ  | 14  | 3200  |

Цена дизельного топлива — 19 рублей за литр, бензина —- 22 рублей за литр, газа — 14 рублей за литр.  |

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| От дома до дачи можно доехать на автобусе, на электричке или на маршрутном такси. В таблице показано время, которое нужно затратить на каждый участок пути. Какое наименьшее время потребуется на дорогу? Ответ дайте в часах.

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|   | **1**  | **2**  | **3**  |
| Автобусом  | От дома до автобусной станции — 15 мин.  | Автобус в пути: 2 ч 15 мин.  | От остановки автобуса до дачи пешком 5 мин.  |
| Электричкой  | От дома до станции железной дороги — 25 мин.  | Электричка в пути: 1 ч 45 мин.  | От станции до дачи пешком 20 мин.  |
| Маршрутным такси  | От дома до остановки маршрутного такси — 25 мин.  | Маршрутное такси в дороге: 1 ч 35 мин.  | От остановки маршрутного такси до дачи пешком 40 мин.  |

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| В таблице даны условия банковского вклада в трех различных банках. Предполагается, что клиент кладет на счет 10000 рублей на срок 1 год. В каком банке к концу года вклад окажется наибольшим? В ответе укажите сумму этого вклада в рублях.

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| **Банк**  | **Обслуживание счета\***  | **Процентная ставка (% годовых)\*\***  |
| Банк А  | 40 руб. в год  | 2 |
| Банк Б  | 8 руб. в месяц  | 3,5 |
| Банк В  | Бесплатно  | 1,5 |

\* В начале года или месяца со счета снимается указанная сумма в уплату за ведение счета\*\* В конце года вклад увеличивается на указанное количество процентов.  |

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| В первом банке один фунт стерлингов можно купить за 47,4 рубля. Во втором банке 30 фунтов — за 1446 рублей. В третьем банке 12 фунтов стоят 561 рубль. Какую наименьшую сумму (в рублях) придется заплатить за 10 фунтов стерлингов? |

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| В среднем гражданин А. в дневное время расходует 120 кВт\cdotч электроэнергии в месяц, а в ночное время — 185 кВт\cdotч электроэнергии. Раньше у А. в квартире был установлен однотарифный счетчик, и всю электроэнергию он оплачивал по тарифу 2,40 руб. за кВт\cdotч. Год назад А. установил двухтарифный счётчик, при этом дневной расход электроэнергии оплачивается по тарифу 2,40 руб. за кВт\cdotч, а ночной расход оплачивается по тарифу 0,60 руб. за кВт\cdotч. В течение 12 месяцев режим потребления и тарифы оплаты электроэнергии не менялись. На сколько больше заплатил бы А. за этот период, если бы не поменялся счетчик? Ответ дайте в рублях. |

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| Вася загружает на свой компьютер из Интернета файл размером 30 Мб за 28 секунд. Петя загружает файл размером 28 Мб за 24 секунды, а Миша загружает файл размером 38 Мб за 32 секунды. Сколько секунд будет загружаться файл размером 665 Мб на компьютер с наибольшей скоростью загрузки?  |

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| Независимое агентство каждый месяц определяет рейтинги Rновостных сайтов на основе показателей информативности In, оперативности Opи объективности Trпубликаций. Каждый отдельный показатель оценивается целыми числами от -2 до 2. Итоговый рейтинг вычисляется по формуле R=25 \cdot \left( \frac{2In+Op+3Tr}{6} + 2 \right). В таблице даны оценки каждого показателя для нескольких новостных сайтов. Определите наивысший рейтинг новостных сайтов, представленных в таблице. Запишите его в ответ, округлив до целого числа.

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| **Сайт**  | **Информативность**  | **Оперативность**  | **Объективность**  |
| VoKak.ru  | 2  | -1  | 0  |
| NashiNovosti.com  | -2  | 1  | -1  |
| Bezvrak.ru  | 2  | 2  | 0  |
| Zhizni.net  | -1  | -1  | -2  |

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| Рейтинговое агентство определяет рейтинг соотношения «цена-качество» микроволновых печей. Рейтинг вычисляется на основе средней цены Pи оценок функциональности F, качества Qи дизайна D. Каждый отдельный показатель оценивается экспертами по 5-балльной шкале целыми числами от 0 до 4. Итоговый рейтинг вычисляется по формуле R=8\left(F+Q\right)+4D-0,01P. В таблице даны оценки каждого показателя для нескольких моделей печей. Определите, какая модель имеет наивысший рейтинг. В ответ запишите значение этого рейтинга.

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| **Модель печи**  | **Средняя цена**  | **Функциональность**  | **Качество**  | **Дизайн**  |
| А  | 1900  | 1  | 1  | 1  |
| Б  | 5900  | 4  | 1  | 2  |
| В  | 3800  | 0  | 0  | 1  |
| Г  | 4100  | 2  | 0  | 4  |

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 | http://mathege.ru/ROOT/images/spacer.gif |

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