Brts customer satisfaciton

To study future preferences & satisfaction level of BRTS customer with reference to Ahmedabad city. Ms. Bhoomi Patel Ms. Purvi Patel Abstract: Purpose – The purpose of this paper is to know BRTS customer' s future preference & satisfaction level of Ahmedabad city. Methodology – we have used convenience sampling method for knowing preferences & satisfaction level of RBTS customer . Research instrument is unstructured questionnaire. Our sample size is 150 BRTS customer of Ahmedabad city.

Research limitations/implications – This study is limited for Ahmedabad city only so the result of the study should not be used for other city. This study will be useful for BRTS service provider for knowing BRTS customer' s future preference. Findings: Most of the BRTS customers are satisfied with the current services of BRTS but there future preference for BRTS is for concession to smartcard users, controller in BRTS, 24 hour services, music system & it should be Double Decker. 1. INTRODUCTION: The Government of Gujarat had declared 2005 the ' Year of Urban Development' (Shaheri Vikas Varsh).

During this particular year, the urban development department undertook various initiatives to resolve urban issues such as traffic management, and the introduction and enhancement of a city transport system. The Gujarat Infrastructure Development Board (GIDB), AMC and Ahmedabad Urban Development Authority (AUDA) jointly drafted a comprehensive urban mobility plan keeping in mind the needs of Ahmedabad as a mega city, and included in it, the implementation of the Bus Rapid Transit System (BRTS) and the planning of the regional rail and metro for future years.

Started in 2009, BRTS today has ambitious projections for the future to make the citizens' lives smoother. The service which began with just a 12. 5 km stretch in 2009 is spread over 45 km today benefiting around 1. 4 lakh passengers daily. BRTS, which started with a fleet of 12 buses, has 75 buses today and the figures will increase to 150-200 buses by next year. " Presently, 1. 4 lakh passengers travel on BRTS bus daily and the income generated is Rs8. 25 lakh. With the increase in number of buses, we are expecting our income to reach Rs13-14 lakh on daily basis and our total passengers will increase to 2 lakh," stated Pedia.

The Ahmedabad municipal corporation, AUDA and GOG organized a series of broad based consultations as part of preparation of statutory development plan, city development part, integrated public transit system plan and BRTS plan. Ahmedabad BRTS is a highly ambitious rapid transport system develop by " Gujarat Infrastructure Development Board" (GIDB) Bus Rapid Transit System or BRTS is a bus based high quality, high capacity rapid transit system that delivers fast, comfortable and cost effective urban mobility. In a BRT system, vehicles travel in exclusive lanes, thus avoiding congestion.

There is provision of segregated right-of-way infrastructure, rapid and frequent bus operations, easy boarding and alighting facilities for the passengers and excellence in marketing and customer service. BRT combines the performance and amenities of a modern rail based transit system with the flexibility and cost advantages of roadway transit. BRT can be built in phases with future expansion options. BRT is a cost effective transit option available to improve the environment, enhance mobility and promote livable cities. Characteristics of a BRTS System A flexible, high

performance rapid transit mode that combines a variety of physical, operating and system elements into a permanently integrated system with a quality image and unique identity * Some of the characteristics of a BRT system which distinguishes it from a normal bus service are: * Segregated bus lanes * Prepaid / Automated ticketing systems * Safe, secure and accessible stations * Platform level boarding * Quality service Bright Features of BRTS Latest Fuel Technology a. CNG or Euro 3rd norms b. Maximum speed in full load: 70km/hour

IT enabled services a. GPRS /GPS vehicle location module , wireless communication module, passenger information system b. On board ticketing machine and smart card validation. Total passenger capacity- 80 a. Seating Capacity – 34 b. Standing Capacity – 56 Bus Features * Semi-Low floor buses (900mm +/- 40mm) * Standard bus (Capacity 80 passengers) * Two central doors * Width of doors in centre 1960 mm * Length of bus -11. 8 m * Cleaner Euro III Diesel or CNG bus * Mix of A. C. and Non A. C. * Use of ITS Information Technology System Global Positioning System (GPS)/General Packet Radio Service (GPRS) module on entire Bus fleet (BRT and AMTS) * Automatic transmission of Vehicle Location to Central Control Center (CCC) * CCC – Bus Driver communication for desired Level of Service * Operator Performance Reports * Automatically generated Operator Payment Advice. Short payment cycles. * CONTROL CENTRE SATELLITE BUS GPS/GPRS COMMUNICATION MODULE WIRELESS NETWORK GPS Console: driver will be able to close and open door from his GPS-enabled console. It will also enable driver to keep track of people getting in and getting off the bus.

Card Validator: Placed at the entrance, the machine will validate the card in less than half a second. Bus Stop: specially designed pneumatic doors at bus stop for passengers. They function with sensors. Electronic Fare Collection System According to the dissertation, among the modes of public transport the positive impact of BRTS on Green House Gas emissions has been the most. This is because after the Ahmedabad Municipal Corporation (AMC) started the BRTS in 2009, around 22% of private vehicle users shifted to BRTS helping to reduce emission and reduction in NOxby 20%, carbon dioxide by 13%, HC by 6. % and CO by 5% apart from PM because BRTS bus uses EURO III diesel buses. Ahmedabad is developing by leaps and bounds — and this is not being done at the cost of harming of its green cover. And now, the Ahmedabad Municipal Corporation is making ambitious plans to achieve the third position in the country for ' cities with the largest green cover'. According to international standards, every city must have around 20-22% of green cover. However, no city in India has yet achieved the required international standard.

The city with highest green cover is New Delhi which has 19% of green cover. Bangalore is second with 17%. Ahmedabad aims to achieve 14% by 2015, which will make it the third highest in the country. Kolkata has a green cover of just 7%, while Mumbai stands high at 13%, Chennai has 11% and Pune 13%. Through various projects and various changes in structural designs, AMC is planning to preserve trees in projects like road widening and construction of new BRTS routes. Apart from that, efforts are being made to increase the green cover by planting saplings. These figures were alarming, as the marginal increase was also due to the inclusion of new areas in AMC,"

said the official. Based on the figures of 2005-06, AMC has decided to plant 12 lakh saplings during five years to reach the desired target. According to AMC's survey, eight lakh saplings were planted in 2010 and the survival rate was 75%. In 2011, 2. 5 lakh were planted and the survival ratio was 90%. " If we move ahead with these figures and maintain the survival rate, the day is not far when we will be the third ranked city with the highest green cover," said the official.

Ahmedabad is a city with present population of 72 lakhs (7. 2 million), which is likely to be 11 million by the year 2035. This would lead to agglomeration of surrounding settlements like Naroda and other smaller villages, which ultimately increases the area of the city, which may become 1, 000 km2 in the year 2035. Moreover, about 1/3 of total as well as student population reside within walking distance from the proposed BRTS network. Thus, there is a growing need for greater accessibility to basic amenities and opportunities for mobility in the city.

In such a state of rapid urbanization, it is very essential to have an efficient and rapid transit system, which will sustain and accelerate the growth of the city. In order to cater this future demand, the city and State Government has initiated a Plan for Integrated Public Transit System, in which Bus Rapid Transit System (BRTS) is one of the components. This will facilitate the major mobility need of the people. In future, this system will get integrated with Ahmedabad Metro by the addition of two lines running through east to west and north to south.

In addition, after the implementation of Ahmedabad BRTS and Metro Link Express Gandhinagar and Ahmedabad, Gujarat International Finance Tec-City (GIFT) would be easily accessible through a multimodal mix of Rapid Transport Systems. Focusing on socio-economic needs, the planners developed priorities: to provide poorer citizens good access to employment and education centers; to create a multimodal system of main and feeder lines that would serve both densely settled districts and more dispersed areas; and to safely accommodate cyclists and pedestrians. We devised routes based on connections to key railway stations, industrial estates, recreational areas and colleges, with the goal of providing access for all Ahmedabadis," recounts Swamy. " We approached NGO's for their guidance on access and inclusivity for the disabled and disadvantaged. " Swamy notes that the proposed 55-mile BRT network was organized to integrate with conventional buses and rail lines and also with automobiles, so citizens could use the different modes for various legs of intercity journeys.

The planners also incorporated cycle lanes and footpaths — far from ubiquitous in India — and these have been extensively landscaped to provide shade. " We opted for full BRT mode, including predominantly dedicated corridors for buses, rather than mixed-use lanes, as in some cities," says Swamy. " Dedicated lanes are the key to making a bus system smooth and speedy — a real alternative to private vehicles. Speaking about future projects, deputy municipal commissioner for BRTS Utpal Pedia said, " In two months smart cards will be introduced so that passengers can enjoy ticketless travel. He added that by March 2012 BRTS will enter new areas and will run on new routes as a 20-25 km stretch will be operational by then.

The aim is to construct new routes and bring it to 95 km in total by next year Unlike other Indian BRTS projects, this project is on full-swing and the system designs are quite similar to Curitiba's Rede Integrada de Transport and Bogota's TransMilenio which are exceptionally better than Delhi BRTS and Pune BRTS. By following this system Chennai BRTS and Bangalore BRTS are also under implementation.

Second half of the first phase of the BRTS was inaugurated on December 25, 2009, birthdate of Atal Bihari Vajpayee, former Prime Minister of India. Phase I was stretched up to Kankaria Lake, to cater eastern part of the city also. It was the first time that BRTS buses crossed river & reached Maningar, the most developed area of the city. It was inaugurated by Gujarat Chief Minister Narendra Modi. 2. LITERATURE REVIEW: BRTS basically consists of segregated lanes dedicated exclusively to these buses. The outermost or the innermost lanes can be reserved for the system.

In case of innermost lanes bus stops can be set up in the median to further improve the flow. BRTS first witnessed its major growth in Curitiba, Brazil in 1974. This urged other cities to develop similar systems. In the late 1990s, BRTS grew rapidly in Quito, Equador, LosAngeles, USA and Bogota, Columbia. The TransMilenio project in Bogota was a huge success and set cutting-edge standards for the forthcoming BRT systems across the world. As of 2005, up to 70 BRT systems have been witnessed all over the globe. The BRTS is a young concept but has been accepted worldwide with open arms.

It has been instrumental in bringing up rapidly developing cities and contributing to their sustainability. Though successfully implemented in

many developed countries, it has to yet find its feet in many developing countries. It has incorporated the use of latest technology from Efficient land use policy to High-Tech Hybrid buses to GPS navigation and tracking to smart card ticketing and has opened the avenues for more innovation in the field of mass transportation; This system takes only a fraction of time and resources as compared to a subway/metro system but still has all benefits.

In the 21st century, urban transport has taken the much needed deviation from a plain point to point transit system to a more modern and effective system which would accept all challenges thrown on it with a smile and something the city administration and more importantly its people could be proud of.

Case study on Analysis of policy processes to introduce Bus Rapid Transit systems in Asian cities from the perspective of lesson-drawing By Jakarta, Seoul, and Beijing: Result was reported that Asian economic crisis in the late 1990s seems to have effected the shift of the values of the policy makers in Jakarta and Seoul to some extent in motivating them to seek lower cost solutions to provide public transport and thus focused attention on BRT systems. However, this impact of the economic crisis on the value change seems to have mitigated by the decentralization trend in Jakarta.

In Seoul, the economic crisis was not the only factor and the accumulated debts due to public transport seems to be rather bigger force that pushed policy makers to turn to the lower cost options. It was also shown that rapid change in traffic volume after the economic recovery might have added to the momentum to urgently address the transport issue in those two cities.

No such linkage between economic crisis and BRT introduction was identified for Beijing. Case study on Institutional Aspects of Bus Rapid Transit by Mark A.

Miller, PATH: Survey responses identified several of the most common and site-independent institutional issues of bus rapid transit systems deemed to be the most important and most difficult to resolve: • Integration of multiple priorities, objectives, and agendas; • Finding political champions to support BRT; • Local and business community opposition to the removal of/restrictions on parking spaces for BRT use; • Availability and acquisition of right-of-way or physical space; • Impacts of BRT on roadway operations; Concerns over long term funding commitments to BRT; • Gaining community support for transit oriented development; and • Educating the public on BRT while managing Perceptions and expectations. Literature Review Summary on Customer Satisfaction of Public Transport: Research| Factors Identified/Considered for Customer Satisfaction | Authors| Railways| Reliability, assurance, empathy, tangibles, and ResponsivenessEmployee behavior and other factorsAvailability of transit ervice, service monitoring, travel time, safety and security, maintenanceAnd construction| Vanniarajan and Stephen(2008)Agrawal (2008)TCRP Report 88, 100| Bus transportation| Availability of shelter and benches at bus stops, cleanliness, overcrowding, information system, safety, personnel security, helpfulness of personnel, physical condition of bus stops| Eboli and Mazzulla(2007) TCRP Report 100| Our study gleaned the insight and expertise of individuals who have experienced these BRT issues. The results should offer guidance in anticipating future problems and developing strategies to solve them.

Follow-on work in this area will include in-depth site-specific case studies of BRT systems to more thoroughly probe into the institutional environment of bus rapid transit. In this way, our research should be able to offer guidance to practitioners involved with bus rapid transit systems. Case Studies on Transit Oriented Development around Bus Rapid Transit Systems in North America and Australia: As already noted, there has been little research into TOD effects of bus rapid transit systems in developed countries.

However, the few studies that have examined BRT and transit oriented development have indicated that BRT can have significant and positive land use impact. Our case studies show that bus rapid transit can promote economic development and support high quality transit oriented development. Notably, these cities present a range of BRT service and infrastructure models, and are promoting TOD in a variety of contexts. The case studies also show that a range of BRT implementation strategies can be used to attract development.

Many developers and report that the BRT must have a prominent visual profile and be aesthetically appealing – particularly the stations. Interestingly, Mohapatra spoke on the recent survey on BRTS passengers and said, " A recent survey suggests that BRTS passengers are subject to lesser vehicular pollution as compared to any other mode of transport. " 3. RESEARCH OBJECTIVE : * Objectives of the study: Primary objective: To know customer satisfaction & perceptions of BRTS customers in Ahmedabad city. Secondary objective: To know percentage of the people who uses their own vehicle or AMTS or sharing vehicle for their daily transportation mode. * To know which facility is more important for BRTS customers in Ahmedabad

city. * To know impact of service quality on customer satisfaction level * To know the future preference of different customer segmentation. * To know the problem faced by different BRTS customer segmentation. * To identify satisfaction level of BRTS customers in Ahmedabad city for different dimension like fare, security, frequency etc. 4. RESEARCH METHODOLOGY:

Data sources: A data source is a mixture of Secondary and Primary data, with Questionnaires being our major instrument to collect primary data. * Primary data: It will include Qualitative method which includes personal questionnaire method. * Secondary data: It will include magazines, internet, research paper and reference books. Sampling Plan: Sampling unit is based on Likert Grade scale from 1 to 5 for each question, Multiple option questions and Scaling techniques. The Likert scale is defined below: 1= strongly disagree 2= Disagree 3= Neutral 4= Agree = strongly agree Sampling Technique: Filling up questionnaires with 18 questions by taking in to consideration customers' satisfaction & perception of BRTS customers in Ahmedabad city. The samples are selected on the basis of convenience sampling. Sample Size: The sample size is 150 customers from the six banks. Data collection Method: Secondary Data: In order to have a proper understanding of BRTS customers in Ahmedabad city, a depth study was done from the various sources such as Books like Marketing research by Naresh Malhotra and Magazines like Business Today.

A lot of data is also collected from the official websites and the articles from various search engines like Google, yahoo search and answers. com. Primary Data: The primary data was collected by means of a survey. Questionnaires were prepared and customers of BRTS customers in Ahmedabad city were

approached to fill up the questionnaires. The questionnaire contains 18 questions which reflect on the type and quality of services provided by BRTS in Ahmedabad city . The response of the customer is recorded on a grade scale of 1 to 5 for each question.

The filled up information was later analyzed to obtain the required interpretation and the findings by using SPSS software. 5. DATA ANALYSIS & INTERPRETATION : Hypothesis test: Ho = There is no impact of annual income on the fare of BRTS bus. H1= There is impact of annual income on the fare of BRTS bus. * ANOVA TEST : Fare| Sum of Squares| df| Mean Square| F| Sig. | Between Groups| 3. 168| 3| 1. 056| 0. 8| 0. 496| Within Groups| 192. 705| 146| 1. 32| | | Total| 195. 873| 149| | | | | Here sig value is 0. 496 greater than p-value so our Ho is accepted. 0. 496 > 0. 5 so we can conclude from this ANOVA test; there is no impact of annual income on the fare of BRTS bus. * Factor analysis : KMO and Bartlett's Test The test of validity of data was examined with the help of a Kaiser-Meyer-Ohlin (KMO) measure of sample adequacy and Barlett's test of sphericity. These two tests satisfied the validity of data for factor analysis. KMO and Bartlett's Test Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | . 701| Bartlett's Test of Sphericity| Approx. Chi-Square| 921. 218| | df| 276| | Sig. | . 000| KMO test value is 0. 701 which is higher than 0. 5 so it is concluded that Factor analysis is possible . . 701> 0. 5. And from Bartlett's test significance value is very low so factor analysis is possible from this data. * Factor Loading of Variables : Factor| Variable| Factor loading| Eigen value| % of variation Explained| 1)Announcement | Clarity of announcement | 0. 644| 2. 726| 9. 745| | It cause irritation | 0. 445| | | | Accuracy of announcement| 0. 377| | |

2)Basic Feature of BRTS | Timely availability | 0. 775| 4. 915| 17. 569| | Speed| 0. 736| | | | Comfort| 0. 720| | | | Distance you need to travel| 0. 759| | | | Availability of bus in your area(Reach)| 0. 700| | |)Safety in BRTS| Steps to reduce accident| 0. 665| 2. 305| 8. 239| | Controller in BRTS| 0. 445| | | | Different door for Entry/Exit| 0. 377| | | 4)Security | Security of self| 0. 716| 2. 0701| 7. 402| | Security of luggage| 0. 824| | | 5)Basic facilities| Fare| 0. 876| 1. 839| 6. 573| | Frequency| 0. 401| | | | Seating arrangement | 0. 424| | | | Smart card| 0. 738| | | 6) Future preference| TV| 1. 121| 1. 569| 5. 603| | Music| 0. 567| | | | Double Decker| 0. 655| | | From the factor analysis, we found that above factors are more important for customer's satisfaction & future preferences of RBTS customers.

So following factors are more important for BRTS customers. 1) Announcement 2) Basic Feature of BRTS 3) Safety in BRTS 4) Security 5) Basic facilities 6) future preference. * Analysis of Mean of Each Question: Variable| fare| frequency| Take steps to reduce accident| TV| Music| Seating| Different bus 4 M/F| 24 hour service| Double Decker| smart card| Mean| 2. 91| 3. 39| 3. 62| 3. 17| 3. 97| 3. 40| 2. 69| 3. 75| 3. 56| 3. 67| * From above analysis we can easily say that Mean of fare is 2. 91. so, fare for the BRTS is not reasonable. * The Mean of Frequency is 3. 39. o; we can say that there is no need to increase the frequency of buses. * The Mean of take steps to reduce the accident at crossing is 3. 62. so; we can clearly say that BRTS should take steps to reduce the accident at crossing. * The Mean of TV facility in BRTS is 3. 17. so, TV facility is not demanded by BRTS customers. * The Mean of Music facility in BRTS is 3. 97. so; we can say that BRTS customer demanding the Music facility in BRTS. * The Mean of seating

arrangement in BRTS is 3. 40. so; we can say that seating arrangement is proper. * The Mean of different buses for male and female is 2. 9. so; there should not be different buses for male and female. * The Mean of 24 hour bus service is 3. 75. so, BRTS customer demanding for 24 hour bus services. * The Mean of double Decker bus s 3. 56. so, BRTS customer prefers that BRTS bus should be change to double Decker. * The Mean of Smart Card for BRTS customer is 3. 67. so; we can say that BRTS customer prefers smart card for operating BRTS service. Variable| Timely availability| speed| comfort| Reach| concession to SCU| overcrowded| controller| Different door| Mean| 3. 96| 3. 99| 3. 69| 3. 77| 3. 88| 3. 80| 3. 61| 3. 3| * The Mean of time availability of BRTS over AMTS is 3. 96. so, timely available BRTS bus over AMTS. * The Mean of speed of BRTS over AMTS is 3. 99. so, speed of BRTS is better than speed of AMTS. * The Mean of comfort level in BRTS is 3. 69. so; we can say that BRTS provide more comfortable service over AMTS. * The Mean of reach (Bus available in your area) BRTS over AMTS is 3. 77. so, more bus available in area of BRTS customer over AMTS. * The Mean of concession to SCU is 3. 88. it indicate that concession demanding by BRTS customer. * The Mean of overcrowded BRTS bus is 3. 0. it means BRTS buses are overcrowded. * The Mean of controller for BRTS is 3. 61. so; we can say that there is need of controller for BRTS bus. * The Mean of different door in BRTS is 3. 93. so, BRTS customer demanding different door for entry and exit. Variable| clarity| Accuracy| Irritation| security of luggage| security of self| Mean| 3. 65| 3. 63| 3. 09| 3. 22| 3. 39| * The Mean of clarity in Announcement of BRTS is 3. 65. so, announcement in BRTS is clear. * The Mean of Accuracy in Announcement of BRTS is 3. 63. so; we can say that announcement is accurate in BRTS. The Mean of Irritation in announcement of BRTS is 3. 09.

so, some are comfortable and some are not comfortable with this. * The Mean of security of luggage is 3. 22. so, luggage is secured in BRTS. * The Mean of security of self is 3. 39. so, customer is secure in BRTS. 6. FINDINGS From over study we came to know 50. 7% of total respondents are using AMTS, 31. 3% of total respondents are using sharing vehicle& 36. 7 % of total respondents are using personal vehicles along with BRTS bus. 1) 50. 7% of total respondents are using BRTS on daily basis &49. % of total respondents are using BRTS occasionally. 2) 38. 7% of total respondents are not satisfied with the fare of BRTS bus. 36. 7% of total respondents are satisfied with fare of BRTS &24. 7% of total respondents are neutral for this. 3) 48. 7% of total respondents are agree for to increase frequency of buses , 20. 7% of total respondents are disagree for this & 30. 7% of total respondents are neutral for this. 4) 57. 3% of total respondents are agree about BRTS should take step to reduce accident at crossing. 5) Most of BRTS customers do not prefer TV in BRTS but 73. % of total respondents are preferred music system in BRTS. 6) We came to know from our study that there should not be different buses for male &female. 7) 69% of total respondents have the preference for the 24 hour service of BRTS. 8) 58. 7% of total respondents prefer that BRTS should be Double Decker. 9) 63. 3% of total respondents think that smart card is better for customer &they think that smart card users should be given special concession. 10) Most of total respondents of BRTS think that clarity &accuracy of announcement are good, but it cause little bit irritation to them. 1) 70% of total respondents are thinking that BRTS buses are overcrowded. 12) 57. 4% of total respondents prefer controller in BRTS to check chaos. 13) 74% of total respondents prefer different door for entry &exit. 14) BRTS customers feel that a BRTS service is

safe &secure. 15) 88% of BRTS customer's age lies between 20-40 years. 16) 82. 7% of BRTS customers' income is less than 2 lakh. 17)Following table represent BRTS users satisfaction for different feature of BRTS service Factor| Agree(%)| Disagree(%)| Timely availability | 74%| 12%| Speed| 74. 3%| 8. 9%|

Comfort| 62. 9%| 12. 7%| Distance you need to travel| 65. 3%| 9. 3%| Availability of bus in your area(Reach)| 68%| 14%| 7. RECOMMENDATIONS: * Fare of the BRTS should be reduced & kept nearer to the fare of AMTS. * BRTS should take steps to reduce accident at crossing. * BRTS should install music system in BRTS to entertain the customers. * BRTS bus should be change to Double Decker to reduce chaos. * It should be for 24 hours. * BRTS should give special concession to their daily users & smart card users. * There should be different door for entry & exit in BRTS. Frequent announcement of BRTS cause irritation so it should be improved. * There should be controller in BRTS for controlling the chaos. 8. CONCLUSION: From our study it is concluded that along with BRTS, most of the customers are using AMTS & personal vehicle as the other mode of commutation. And majority of BRTS customers are using BRTS services on daily basis. And most of the BRTS customers are not satisfied with fare of BRTS . And there is no need to increase frequency but it should be Double Decker. Seating arrangement is proper . for entertaining the customers, music facility should be provided.

It should be for 24 hour services. And smart card users should be given special concession . People prefer more BRTS other than AMTS because of salient feature of BRTS like timely availability, speed, comfort & reach of the

bus. BRTS customers feel safety & security while they are using BRTS service. From our study and by using various statistical tools , we came to know Announcement , Basic Feature of BRTS, Safety in BRTS Security , Basic facilities , future preference for Bus services are important factors for the further improvement of BRTS services . 9.

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