IBDP Physics Internal Assessment

Candidate Number: gzk284

Research Topic: What is the relationship between electric current and the stopping time of eddy current brakes (ECBs) in high speed trains?

1 Foreword

I have always been obsessed with trains throughout the entirety of my childhood; the streamlined aesthetics and speediness of a train simply fascinated me. But when I was small, I was panicky with the high pitched screeching noises of a train as well, which occurs frequently when travelling in Hong Kong's underground MTR (Mass Transit Railway). I later knew that the screeching noises were probably a result of the locomotive's brakes.

Having visited Japan 3 times in my childhood, the Shinkansen has once again captivated my enthusiasm for trains. I was in love with the Shinkansen 700 series due to its unique aesthetic, its "duck bill" nose in particular; incidentally, when I was doing some research regarding the 700 series (Figure 1), I realised one key feature that differentiated itself from most of the trains in Hong Kong: it had an eddy current braking system as opposed to the conventional pneumatic brake (air brake), which allows it to decelerate elegantly and quietly.

In class, I learnt that by Lenz's law, eddy currents, which are a result of electromagnetic induction, are created to oppose the change in magnetic field. With this in mind, in this investigation, I have taken the opportunity to conduct a quantitative research on eddy current brakes (ECBs).



Figure 1 Shinkansen 700 series (Wikipedia Commons, 2009)

2 Introduction to eddy current brakes (ECB)

Brakes are used by railway locomotives to decelerate, to control acceleration in downhill situations or to keep a locomotive standing still. Some conventional railway brakes are (1) band brakes which consist of a band that tightens around a rotating cylindrical object, (2) clasp brakes which literally clasp the tyres to decelerate, (3) hydraulic brakes which apply fluid pressure for deceleration, and (4) friction brakes which relies on the friction between two surfaces pressed against each other.

An ECB, however, relies on the drag force provided by the electromagnetic force between an electromagnet and a metallic conductor. When there is relative motion between the conductor and the magnet, by Faraday's Law of induction, this will induce an electromotive force that is proportional to the rate of change of magnetic flux linkage and loops of electrical current within the conductor known as eddy currents. By Lenz's law, the eddy currents will create a counter magnetic field that opposes the magnetic field of the magnet.

As a result, in a case where the magnet is stationary and the conductor is in motion, the conductor will encounter a drag force from the magnet which is proportional to the velocity of the conductor; this will cause it to retard.

Since the eddy currents have to flow through the resistance of the conductor, the kinetic energy of the moving conductor will eventually be released as heat, which is a phenomenon known as joule heating (Thangaraju, 2015). For this reason, ECBs will not cause the screeching noises traditionally found in brakes relying on friction, and they are not prone to wearing out since the magnet is never in contact with the conductor.

With respect to the postulations and principles above, a study by Sokolov has proposed the model derived from D.Schieber valid at low speeds. The model is:

$$F_e = \frac{1}{4} \frac{\pi}{\rho} D^2 dB^2 cv \cdots (1)$$

$$c = \frac{1}{2} \times \left(1 - \frac{1}{4} \frac{1}{\left(1 + \frac{R}{A}\right)^2 \left(\frac{A - R}{D}\right)^2} \right)$$

- **F**_e Braking force of ECB
- ρ Resistivity of disc material
- **B** Strength of Magnetic Field
- **d** Thickness of disc (m)
- D Diameter of Soft Iron pole (m)
- **c** Proportionality factor, ratio of total disc resistance to resistance of part under pole
- *v* Tangential Speed of Rotating disc
- R Distance of centre of pole from centre of disc
- A Total radius of disc

Thus, an ECB's braking force is proportional to the tangential velocity of the moving conductor, or in other words:

$$F_e \propto v$$

Therefore, a disadvantage of ECBs is, since there must be a relative motion between the conductor and magnet to cause a rate of change of magnetic flux, it has no "holding force" for a locomotive that is standing still.

3 Preliminary work for experiment

For real ECBs in the 700 Series Shinkansen, a conductive yet non-ferromagnetic metal disc (known as a rotor) is attached to the vehicle's wheel, with electromagnets of opposite poles located on both sides of the disc. Hence, when the driver steps on the brake pedal, a certain magnitude of current will be created, which will create a magnetic field; this will brake the rotor and the entire axle (Sokolov, 2016).

For the purposes of my experiment, I will only be creating a setup with a rotor (motor with disc rotating with it) and 2 electromagnets, and I will like to investigate the quantitative relationship between the magnetic field strength of the electromagnet and the stopping time of the rotating disc. Yet, the electromagnets have to be closely positioned to the disc, and there is no available lab equipment for measuring the magnetic field in between two closely positioned electromagnets.

By ampere's law, in a direct magnetisation setup where the current is passed directly through the disk, the magnetic field around that wire is directly proportional to its current (Deziel, 2018). In other words, the

excitation (magnetic field generated by means of an electric current) current of the electromagnet is proportional to its magnetic field strength. Therefore, the relationship between excitation current and stopping time of the aluminium disc will be investigated.

Variables

Independent Variable

Excitation current of electromagnet: This is achieved by adjusting the knob on the rheostat.

Dependent Variable

Stopping time of rotating disc: This is collected by the light gate.

Justifications for Controlled Variables and selected apparatus

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Controlled Variable	Justification
Air gap of 5mm on both sides of the disc and position of electromagnet	Magnetic field strength is weaker as distance increases from the electromagnet, so the position of electromagnet relative to disc must be kept constant
Power Supply for rotor of 4V	Braking force of an ECB is proportional to the tangential velocity of the moving conductor, so initial velocity must be maintained constant. During my preliminary experiment, it was discovered that using a lower voltage like 2V has resulted in stopping times too short to be measured, while using a higher voltage like 6V has melted the glue sticking the disc to the shaft and made the rotation wobbly; 4V has been chosen as the best compromise.
Initial position of disc: slit of disc at the top	Since the light gate calculates the speed of the rotating disc by counting the frequency for light passing through the slit, a same initial position will ensure that the initial velocity is calculated correctly.
Duration of turning on motor	A 115 second duration ensures that the rotor can reach its maximum speed.
Other apparatus kept constant	Justification
Aluminium disc	While past studies have proven a wide range of metals like zinc suitable for similar occasions, aluminium was proven the most effective for similar experiments (Baharom et al., 2011) Furthermore, I was able to obtain pieces of scrap aluminium for free in shops selling aluminium framed windows.
Light gate	While other options like the rotary motion sensor was available, the light gate is proven the best option since it does not add additional friction to the rotor. It only required a slit cut on the disc.
Transformers with 1000 coils	In this experiment, transformers act as electromagnets, and since more turns of coils result in a greater magnetic field strength, I chose the 1000-coil transformers, which are the ones with the most turns of coils in our school lab. This will allow me to test with a wider range of magnetic field strengths.

Table 1 Justifications for Controlled Variables and selected apparatus

Experiment setup

Figure 2 is an overview of my experiment setup whereas Figure 3 is a circuit diagram for my setup.

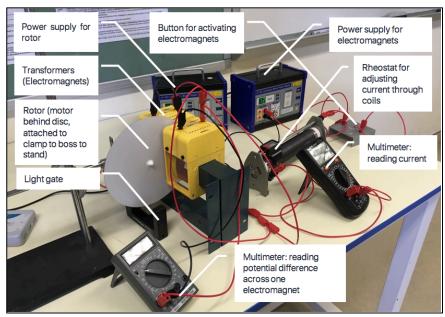


Figure 2 Photo of setup

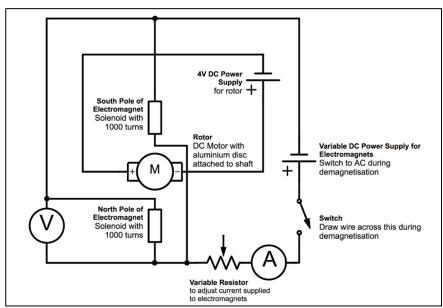


Figure 3 Circuit diagram for setup

Procedures

- 1) Setup the experiment according to the figure 2.
- 2) Adjust the rheostat to adjust the current to the desired value; take down the values of current of entire circuit and potential difference across one electromagnet.
- 3) Ensure slit is at the top position of the disc. This is maintained for consistency.
- 4) Click "Start" for collecting data on computer and start the stopwatch. In 5 seconds, switch on the motor; To minimise the time to switch on supply to 4V, set the power supply to 4V and plug in one cable; plug in the another cable to reach 4V immediately
- 5) After 120 seconds or 2 minutes on the stopwatch, switch off power supply for rotor and immediately press the switch for the electromagnet; Hold on to the switch until rotor has completely stopped moving.
- 6) Before the next trial, **the electromagnets must be demagnetised.** To demagnetise the magnet, change the supply of the electromagnets to AC current; Starting at 10V A.C., drop the voltage slowly, 1V every 3 seconds. Remember placing a cable across the switch before doing so and removing it after doing so.

4 Experiment Results and Analysis of Data

Raw Data Graphs

Velocity-Time Graphs for all trials

Since the light gate collects the gate state whenever the light is unblocked, over 70,000 cells of data has been generated, which is too large to be fit into this document. As a compromise and for environmental concerns, only the averaged data and data for electromagnet with supply 0.3A has been offered in the appendices. The raw data graph of velocity against time for all experiments (each with 3 trials) is all shown in figure 4. Note that the error bars are too small to be seen; the absolute uncertainties for velocity and time are is $\pm 0.001 \, ms^{-1} \, s$ and $\pm 0.000001 \, s$ respectively, which is the resolution of the equipment.

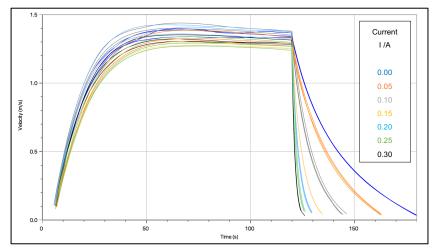


Figure 4 Raw Data: Velocity of against time, legend in graph.

Processed Data Graphs

Velocity-Time Graph for each Independent Variable (Average of 3 trials)

To gain a more concise perspective for how the disc decelerates with each electromagnet, the data from 3 trials of each experiment will be collated together. This involves taking data from the maximum deceleration onwards for each trial, and averaging the duration from last data point and the velocity for the 3 corresponding data set (which are now in sync). This results in one line for every electromagnet configuration (7 lines for 7 configurations). For example, table 2 is the first few data points of electromagnet with current 0A (for which the acceleration is at a minimum), which will be utilised in later calculations.

Run 1 (Trial 1))		Run 2 (Trial 2	(Trial 2) Run 3 (Trial 3)					Average	Average
Time	Velocity	Acc	Time	Velocity	Acc	Time	Velocity	Acc	Velocity	Time
119.605761	1.367	-0.07	119.812572	1.340	-0.07	119.944956	1.328	-0.07	1.345	0.000000
119.605987			119.812803			119.945190				0.000230
119.642374	1.364	-0.07	119.849927	1.337	-0.07	119.982640	1.325	-0.07	1.342	0.037217
119.642601			119.850158			119.982874				0.037448
119.679058	1.362	-0.07	119.887354	1.335	-0.07	120.020400	1.323	-0.07	1.340	0.074508
119.679285			119.887586			120.020633				0.074738

Table 2 First 6 data points for experiment using electromagnet with current 0A, explanations for table headings in table 3.

Note that there is a blank cell for every other cell since the light gate works by calculating the frequency the light can pass through the slit of the disc. Hence, it collects data when the gate state is 0 or when it is unblocked. In addition, since the table headings might be too small; table 3 outlines some details for each heading:

Time	Velocity	Acc	Average Velocity	Average Time
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t/s	v/ms ⁻¹	a/ms^{-2}	v/ms ⁻¹	t/s
$\Delta t = \pm 0.000001s$	$\Delta v = \pm 0.001 ms^{-1}$	$\Delta a = \pm 0.01 ms^{-2}$	$\Delta v = \pm 0.001 ms^{-1}$	$\Delta t = \pm 0.000001s$
Timestamp from start of experiment (cumulative). The first 120s include 5s of buffering and 115s of motor switched on, which will allow the rotor to reach its maximum velocity. Only data points that come at and after the maximum deceleration are used for processing as there are too many data points before 120s.	Instantaneous velocity	Instantaneous Acceleration	Average velocity with respect to average time	The average time for the first row is zero since it is the first data set. For the next row onwards, it is the average duration from the last point added to the previous time (time is cumulative in this case).
Absolute uncertainty is listed w by data from digital photo gate (-	Absolute uncertainties remain the same as the absolute uncertainties of the corresponding columns.		

Table 3 Details for table headings in table 2, justifications for absolute errors given

The average velocity is evaluated by averaging the velocity across every row. The average time for the first row is zero since it is the first data set. For the next row onwards, it is the average of the duration from the last point added to the previous time (time is cumulative in this case). For example, for row 2,

$$Avg\ Time = \frac{(119.605987 - 119.605761) + (119.812803 - 119.812572) + (119.945190 - 119.944956)}{3} + 0$$

$$= 0.00023033 \approx 0.000230\ seconds$$

These calculations is repeated for the 7 electromagnet configurations (each consisting of 3 trials). The average times and average velocities for every experiment will then be plotted against each other on the following graph. Figure 5 shows the graph of data fitted with exponential regression models:

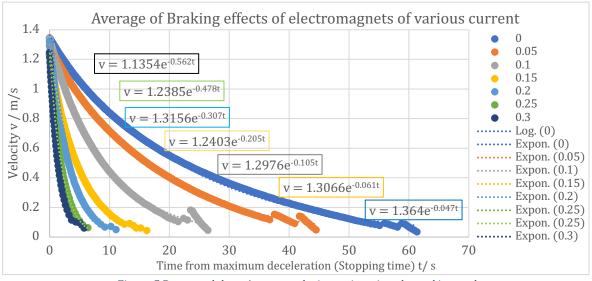


Figure 5 Processed data: Average velocity against time, legend in graph

While the graph shows a clear trend of proportionality, several observations can be made. For the above natural exponential graphs with general equation $v=ce^{bt}$, "c" represents the v-intercepts, whereas "b" indicates the growth factor of the variable "v". Hence, in theory, "c", which is the initial velocity, must remain constant, since the motor has been given a potential difference of 4V throughout the experiment. The fact that "c" varies between 1.1354 and 1.364 ms⁻¹ indicates that the various imperfections in the rotor.

On the other hand, although "b" does not have a physical meaning, differentiating velocity gives deceleration $a = cbe^{bt}$. While there is a rate of change of acceleration or jerk, initial or maximum deceleration where t=0 is obtainable, which gives $a_{max} = cb$. Since growth factor b is increasing in magnitude when a greater current is applied to the electromagnet, for example: from 0.047 to 0.562 when current is increased from 0 to 0.3A, it can be deduced that maximum deceleration a_{max} increases with current.

Summary Data Table for Raw Data and Processed Graphs

However, the light gate not only offered data for instantaneous velocity. Acceleration data is given as well. In table 4, raw data for each configuration of the electromagnet (at a respective current and potential difference) is given. Note that the stopping time is processed data, and it is the time from maximum deceleration (minimum acceleration) to the moment of completion, where the rotor has stopped spinning. There are several assumptions:

- 1) Although the ideal voltmeter is supposed to have infinite resistance, it is placed in parallel with a high-resistance electromagnet (transformer), so there may be a substantial error in measuring the potential difference across it. Assume voltmeter is ideal.
- 2) Assume the magnetic field generated by the induced eddy currents is negligible.
- 3) Assume initial velocity for all trials are constant, even though it varies due to imperfections in the rotor; nonetheless, this assumption enables calculations relating to average braking force to be performed.

Note that error bars for potential difference across electromagnet and time intervals are invisible on graph; their absolute uncertainties are stated in the following table.

Excitation Current of electromagnets I/A $\Delta I = \pm 0.01A$	Potential Difference across each electromagnet $P.D./V$ $\Delta P.D. = \pm 0.01V$	Trial	Maximum Deceleration a_{max}/ms^{-2} Δa_{max} $= \pm 0.01ms^{-2}$	Stopping Time t/s Δt $= \pm 0.000001s$	Average Maximum Deceleration $\overline{a_{max}}/ms^{-2}$ $\Delta \overline{a_{max}}$ $= \pm 0.01 ms^{-2}$	Average Stopping Time \bar{t}/s $\Delta \bar{t}$ = $\pm 0.000001s$
Absolute uncertarespect to the (resolution) from		unit given by d	ainty the smallest lata from digital Vernier, 2018).	same as the abso	Absolute uncertainties remain the same as the absolute uncertainties of the corresponding columns.	
		1	-0.07	62.256258		
0.00	0.00	2	-0.07	60.828349	-0.07	61.455534
		3	-0.07	61.281995		
		1	-0.08	43.990678		
0.05	2.31	2	-0.08	44.427722	-0.08	44.563511
		3	-0.08	45.272132		
		1	-0.16	27.572531		
0.10	4.46	2	-0.15	26.399369	-0.16	26.502517
		3	-0.16	25.535650		
		1	-0.25	16.578486		
0.15	9.00	2	-0.25	15.701608	-0.25	15.991377
		3	-0.25	15.694036		
		1	-0.42	11.050418		
0.20	8.96	2	-0.40	11.238213	-0.41	10.999577
		3	-0.40	10.710099		

0.25	10.00	1	-0.59	7.039282		7.208168
		2	-0.55	7.106932	-0.57	
		3	-0.56	7.478290		
0.30	13.46	1	-0.80	7.852687		6.147882
		2	-0.80	5.189445	-0.81	
		3	-0.82	5.401515		

Table 4 Summary table for raw and processed experimental data.

In the figures 6 and 7, excitation current of the electromagnets is plotted against average stopping time and average maximum deceleration (minimum acceleration is maximum deceleration) respectively.

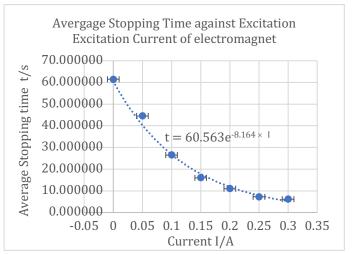


Figure 6 Average stopping time against excitation current of electromagnet

Figure 7 Average maximum deceleration against excitation current of electromagnet.

Once again, all the data has been fitted with exponential regression models, and the fact that the lines fit within every error bar shows that they are accurate models. On a side note, while a_{max} is not $0 \, ms^{-2}$ when no current is applied, it is not a random error; instead, this constant reveals the existence of friction between the shaft and the motor. Yet, for the purposes of this experiment, friction has not been eliminated in the calculations.

Since an exponential graph is not useful for analysis, therefore, linearization will be performed.

Linearization of Graphs

a) The D.Schieber's Model (1) proposes braking force F_e is proportional to the square of magnetic field strength applied, that is:

$$F_o \propto B^2$$

b) The change in momentum for every experiment is assumed to be the same since 1) the same disk is used which means the mass is constant; 2) the final velocity of the rotating disk is zero, and; 3) the initial velocity is assumed to be constant. Therefore, by Newton's second law of motion, average braking force F_e is proportional to the rate of change of momentum of the rotating disk as outlined, and hence it is also inversely proportional to stopping time of the disk:

$$F_e \propto \frac{\Delta p}{t} \ or \ F_e \propto \frac{1}{t}$$
;

c) Hence, the squared of the magnetic field strength should be inversely proportional to the stopping time of a rotating disk, or in notation:

$$B^2 \propto \frac{1}{t}$$

d) However, since excitation current is proportional to the magnetic field strength of a direct magnetisation component as outlined by Ampere's Law (Deziel, 2018), or in notation:

$$I \propto B$$

e) Therefore, in theory:

$$I^2 \propto \frac{1}{t} \cdots (2)$$

f) On the other hand, since the initial average braking force is also directly proportional to the maximum deceleration of the disk with respect to Newton's second law of motion, or in notation:

$$F_e \propto a_{max}$$

g) Therefore, with respect to the principle outlined in (a), (c) and (d),

$$I^2 \propto a_{max} \cdots (3)$$

In other words, with respect to (2) and (3), a graph of $I^2 \propto \frac{1}{t}$ and $I^2 \propto a_{max}$ will be plotted such that they will yield a linear regression line. The maximum and minimum slope lines have been plotted with respect to the absolute uncertainties of I^2 , $\frac{1}{t}$ and a_{max} as well. The results are as shown in figure 8 and 10 respectively:

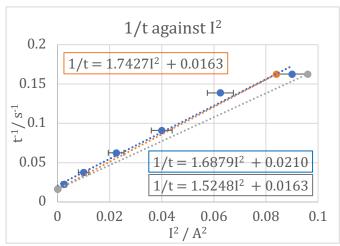


Figure 8 Graph of 1/t against I2

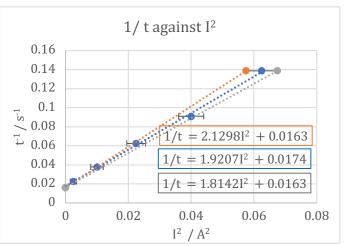


Figure 9 Figure 8 with 6th point (anomaly) removed

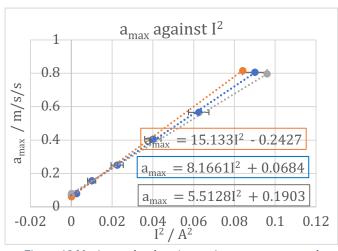


Figure 10 Maximum deceleration against current squared.

Initially, the trend did not appear promising since it did not pass through the error bars of the 6^{th} data point. Yet, removing the 7^{th} point allowed for a linear regression that passed through all error bars as shown in figure 9. This anomaly indeed suggests a major systematic error in the last experiment.

Note that the error bars and absolute uncertainties of I² are now ±0, 0.001, 0.002, 0.003, 0.004, 0.005 and 0.006A for the 7 points respectively, which is a result of doubling the percentage uncertainty of excitation current (I) when squaring itself. Since the absolute uncertainty of time is $\Delta \bar{t} = \pm 0.000001s$, the percentage uncertainty and absolute uncertainty of $\frac{1}{t}$ is an infinitesimal number that is invisible on graph.

Indeed, the fact that the best fit linear regression models $1/t = 1.9207I^2 + 0.0174$ and $a_{max} = 8.1661I^2 + 0.0684$ lie within the error bars indicates that they are good model for both $I^2 \propto \frac{1}{t}$ and $I^2 \propto a_{max}$. Indeed, the deduced relationships of the trendlines are all consistent with the model proposed by D.Schieber.

5 Conclusion

After the experimental data has been collected and processed, it can be concluded that the results support D.Schieber's model to a great extent. This can be proven by the fact that all linear and exponential regression models for the raw and processed data graphs lie within the error bars of the variables; this verifies the relationships for both $I^2 \propto \frac{1}{t}$ and $I^2 \propto a_{max}$ and in return supports the claims made in D.Schieber's model, and its premises made with respect to ampere's Law and newton's second law of motion.

One can notice the relatively high precision in data obtained from the light gate, which includes the time interval in between blocked and unblocked gate states, instantaneous velocity and instantaneous acceleration. The absolute uncertainties for these variables were ± 0.000001 s, ± 0.001 ms⁻¹ and 0.01ms⁻² respectively, which is quite negligible since they are invisible on the graphs. The absolute uncertainties for excitation current through electromagnet and potential difference across electromagnet are 0.01A and 0.01V respectively, which are considerably larger but still relatively small for a school lab experiment. Yet, the regression line for all graphs, with the exception of one data point in the graph for I^2 against $\frac{1}{t}$, managed to pass through all error bars, which means that the regression models are all statistically significant.

All in all, the experimental data has a relatively high precision as demonstrated by small absolute uncertainties, and a high accuracy as shown by the regression lines lying within the error bars. In other words, the systematic and random errors were considerably small. Therefore, I hereby declare $1/t = 1.9207 \times I^2 + 0.0174$ and $a_{max} = 8.1661 \times I^2 + 0.0684$ successful regression models for the relationship $I^2 \propto \frac{1}{t}$ and $I^2 \propto a_{max}$ respectively, and I hereby this experiment a successful investigation.

6 Evaluation

As a whole, the processed data does not reveal evident errors, which means that many errors in the experiment are of low significance. However, the weaknesses and limitations of the data collection process and methodology is apparent in the raw data section. The following outlines the possible sources of systematic and random errors in the experiment, possible limitations in the methodology and the improvements that may be made.

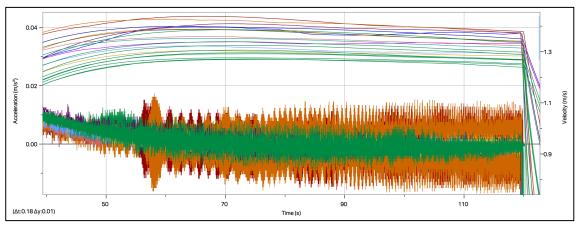


Figure 11 Velocity (right y-axis) and acceleration (left y-axis) of rotor against time

1) Figure 11 is the raw data of velocity and acceleration of rotor against time, where the top cluster of lines are for velocity (right y-axis) and lower cluster of lines are for acceleration (left y-axis). In the experiment, a 2 minute buffer was given to allow the motor to reach its top speed before the electromagnetic brake was applied. However, as outlined by the graph, the top speed of the rotor is inconsistent across various trials, with the range being nearly 0.02ms⁻¹, and for many trials, the maximum speed dropped after 70

seconds. This was likely due to the glue between the shaft and aluminium disk melting, leading to increased wobbling of the disk, as shown by the large variation in acceleration of disk between 50 and 120 seconds. This random error has resulted in unprecise detection by the light; to improve, a more heat resistant glue can be used and a motor with higher power rating should be utilised, such that there will be less heat dissipated during high power usage.

- 2) There is a time delay for starting the motor at 5 seconds and switching the motor off and switching on the electromagnet at 120 seconds. To reduce the error during data collection, I made sure:
 - a. The power supply was at 4V such that I could directly plug in the cable at 5 seconds and allow the motor supply to reach 4V immediately (without pressing the buttons to reach 4V from 0V).
 - b. Switch entire power supply of rotor off immediately at 120 seconds to reduce latency.
 - c. Rheostat was configured beforehand. I also demagnetised the electromagnet by slowly dropping the current of the AC supply from a high voltage. Before I started the experiment, I removed the wire across the switch (such that the current would only pass if the switch was closed). This allowed me to close the switch at 120 seconds and output the desired current immediately.

Moreover, in an attempt to eliminate the time delay entirely from the processed data, the processed data only analyses data after the maximum deceleration.

These measures, however, did not make these random errors less conceivable in the raw data graphs. One way to reduce the error is to automate the switch opening and closing process with a microcontroller kit, though it would be time consuming to program the sequence and to setup the hardware. To a certain extent, if the program is not executed in a smooth manner, the reliability might be even lower.

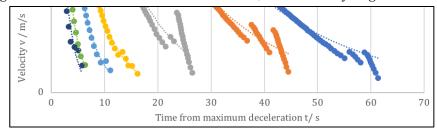


Figure 12 average velocity against time from maximum deceleration of rotor (Cropped from figure 5)

- 3) Figure 12 shows the average velocity against time from maximum deceleration of rotor, and in this segment it appears that the velocity has sudden "spikes" before it completely stops. Due to small random errors, most likely the time delay in activating the electromagnet, the stopping time for the same configuration varies across 3 trials. As a result of averaging the velocity of the 3 trials from maximum deceleration, when the trial with the shortest stopping time is complete, only the velocity of the 2 remaining trials is averaged, which is higher since the disk continues rotating. The same goes on for when only the velocity of 1 remaining trial is plotted on the graph. One way to solve the problem is to remove the data after the trial with the shortest stopping time is completed. However, this would mean that the data from all 3 trials will not be fully utilised, which undermines the purpose of repeating the experiment.
- 4) The y-intercepts in the regression equations $a_{max} = 8.1661 \times l^2 + 0.0684$ and $a_{max} = 0.0638e^{8.7161 \times l}$, namely 0.0684 and 0.0638ms⁻² represent the deceleration when there is no current applied to the electromagnet. In theory, there should be no deceleration in this scenario, and for this reason, this number represents the friction existent in the motor component. In ideal situations, using a motor with infinitesimal friction would have yielded a result that perfectly fits the relationship in D.Schieber's model, which would allow the researcher to take into account the other factors in the model.

7 Limitations

While the relationship between magnetic field strength and stopping time is distinctly noticeable in the experiment, there are various real-life implications that has prevented me to answer the question with respect

to real ECBs in high speed trains and to extrapolate or relate the conclusions of this experiment to ECBs in high speed trains. The following are several real-life problems that have not been accounted for in this experiment:

- 1) In a typical Shinkansen, the disk (similar to the one utilised in the experiment) is attached to the middle of a shaft, which has the wheels positioned at the ends of the shafts. In some cases, the shafts are attached to other rotors which indirectly rotate the wheels. As a result of this complex setup, there is more friction loss in the mechanisms, further magnifying the effect of braking.
- 2) In this experiment, the mass of the aluminium disk is very low and the rate of change of momentum as it is rotating is relatively low as well. The motion of a high speed locomotive combined with the substantial mass of the shafts, wheels and other components of the brake will result in a momentum of considerable size. Since the average braking force of the brake has to be proportional to the rate of change of momentum of the combined mass of these components, the average braking force has to be larger.
- 3) In ECBs, the eddy currents are dissipated as heat. Hence, while increasing the magnetic field will decelerate the locomotive quicker, it will result in more heat, further compromising on the longevity of the train components. Hence, ECBs are likely not utilised to their full potential on high speed trains.
- 4) The confidential details of an ECB on a 700 series Shinkansen, including the material of the disk and width of air gap between electromagnets and disk, is not disclosed by Kawasaki, which makes it impossible to replicate the real setup of the brake. These details are key factors that have to be accounted for the D.Schieber's model. Other environmental factors like air resistance and dynamic friction between wheels and rails, and friction in rotor has not been accounted as well.

8 Works Cited

- Baharom, M.Z., et al. "EDDY CURRENT BRAKING STUDY FOR BRAKE DISC OF ALUMINIUM, COPPER AND ZINK." Regional Engineering Postgraduate Conference (EPC) 2011, Faculty of Mechanical Engineering Universiti Malaysia Pahang; Department of Mechanical and Material Engineering Universiti Kebangsaan Malaysia., 2011, umpir.ump.edu.my/id/eprint/3064/1/EPC2011_zairi_edited_after_1st_reviewed.pdf.
- Codeczero et al. "Eddy Current." *Princeton*, www.princeton.edu/ssp/joseph-henry-project/eddy-currents/eddy_wiki.pdf.
- Deziel, Chris. "How to Increase the Strength of an Electromagnet." *Sciencing*, Leaf Group Ltd., 17 Apr. 2018, sciencing.com/increase-strength-electromagnet-4461184.html.
- González, Manuel I. "Experiments with Eddy Currents: the Eddy Current Brake." INSTITUTE OF PHYSICS PUBLISHING, EUROPEAN JOURNAL OF PHYSICS, Departamento De F´ısica, Universidad De Burgos, 09006 Burgos, Spain, 20 Apr. 2004, users.df.uba.ar/sgil/physics_paper_doc/papers_phys/e&m/Experiments_eddy_currents.pdf.
- Hribar, Jure. "MAGNETIC BRAKING." *UNIVERSITY OF LJUBLJANA FACULTY OF MATHEMATICS AND PHYSICS DEPARTMENT OF PHYSICS*, UNIVERSITY OF LJUBLJANA FACULTY OF MATHEMATICS AND PHYSICS DEPARTMENT OF PHYSICS, mafija.fmf.uni-lj.si/seminar/files/2007_2008/1-BRAKING_MAGNETIC.pdf.
- Shrivastava, Shivanshu. "A Parametric Analysis of Magnetic Braking The Eddy Current Brakes For High Speed and Power Automobiles and Locomotives Using SIMULINK." *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering,* Tech, Department of Electrical & Electronics Engineering, VIT University, Vellore, India, Aug. 2014, www.ijareeie.com/upload/2014/august/22_AParametric.pdf.
- Sooyoung, Cho, et al. Calculation of the Eddy Current Loss and Braking Characteristic Analysis of the Eddy Current Brake. Hanyang University, Keimyang University, Korea National University of Transport, Korea (the Republic of), www.compumag.org/CMAG2017/[PC-M1-13]_506.pdf.

Appendix 1: Averaged data Overview

		Potential			
Variable	Current	Difference	Acceleration	Velocity	Time
Units	A	V	m/s/s	m/s	s

Current	0.0	00	0.0	05	0.	.10	0.1	15	0.2	20	0.2	25	0.3	0
Potential Difference across Electromagnet	0.0	00	2:	31	4	.46	9.0	10	8.9	96	10.	00	13.4	16
Average Maximum Deceleration	0.0			08		.16	0.2		0.4		2.0		0.8	
Average Retardaton Time	61.45	5534	44.563	51067	26.502	251667	15.991	37667	10.999	57667	7.208	3168	6.14788	32333
	Average Velocity	Average Time	Average Velocity	Average Time		Average Time		Average Time	Average Velocity	Average Time	Average Velocity	Average Time	Average Velocity	Average Time
	1.345	0.000000 0.000230	1.292	0.000000 0.000243	1.345	0.000230	1.228	0.000000 0.000255	1.321	0.000000 0.000236	1.231	0.000000 0.000254	1.245	0.000000 0.000251
	1.342	0.037217 0.037448	1.288	0.038773 0.039017	1.339	0.037273 0.037505	1.218	0.040876 0.041134	1.305	0.038107 0.038345	1.208	0.041010	1.212	0.040711
	1.340	0.074508 0.074738	1.285	0.077642 0.077886	1.333	0.074706 0.074939	1.208	0.082094 0.082353	1.290	0.076662	1.185	0.082824	1.179	0.082541
	1.337	0.111870 0.112101	1.282	0.116607 0.116852	1.327	0.112305 0.112538	1.198	0.123661 0.123922	1.275	0.115683 0.115927	1.161	0.125479	1.147	0.125558
	1.334	0.149305 0.149537	1.279	0.155670 0.155915	1.322	0.150066 0.150301	1.188	0.165583 0.165846	1.259	0.155176 0.155424	1.137	0.169013	1.114	0.169830
	1.332	0.186812 0.187045	1.276	0.194830 0.195076	1.316	0.188233	1.178	0.207866	1.243	0.195159 0.195410	1.114	0.213463	1.081	0.215434
	1.329	0.224394 0.224626	1.273	0.234088	1.310	0.226095 0.226331	1.168	0.250517 0.250785	1.228	0.235645	1.090	0.258868	1.048	0.262454
	1.327	0.262047	1.270	0.273443	1.304	0.264364	1.158	0.293542	1.212	0.276642	1.066	0.305272	1.015	0.310982
	1.324	0.299774 0.300009	1.266	0.312896 0.313144	1.298	0.302804 0.303043	1.147	0.336947	1.197	0.318168 0.318428	1.042	0.352720 0.353021	0.982	0.361118 0.361437
	1.322	0.337576	1.263	0.352446	1.292	0.341417 0.341656	1.137	0.380740	1.182	0.360235	1.019	0.401259	0.949	0.412975
	1.319	0.375450	1.260	0.392093	1.286	0.380204	1.127	0.424927	1.166	0.402858	0.995	0.450942	0.916	0.466675
	1.316	0.413399	1.257	0.431839	1.281	0.419168 0.419410	1.117	0.469517 0.469797	1.151	0.446052	0.971	0.501822	0.883	0.522357
	1.314	0.451423 0.451658	1.254	0.471684 0.471934	1.275	0.458310 0.458553	1.106	0.514514 0.514797	1.135	0.489834	0.948	0.553960 0.554292	0.849	0.580175 0.580544
	1.311	0.489520 0.489756	1.251	0.511628 0.511879	1.269	0.497876	1.096	0.559926 0.560212	1.120	0.534219 0.534497	0.924	0.607419 0.607759	0.816	0.640305 0.640689
	1.309	0.527693 0.527930	1.248	0.551673 0.551925	1.263	0.537135 0.537380	1.086	0.605760 0.606049	1.104	0.579226 0.579508	0.900	0.662266 0.662615	0.783	0.702943 0.703343
	1.306	0.565940 0.566177	1.244	0.591819 0.592071	1.257	0.576820 0.577067	1.076	0.652023 0.652314	1.088	0.624871 0.625158	0.877	0.718577 0.718935	0.750	0.768314 0.768732
	1.304	0.604263 0.604500	1.241	0.632065 0.632318	1.251	0.616691 0.616938	1.066	0.698722 0.699016	1.073	0.671174 0.671465	0.853	0.776431 0.776800	0.716	0.836675 0.837113
	1.301	0.642661 0.642899	1.238	0.672413 0.672667	1.246	0.656746 0.656995	1.056	0.745867 0.746163	1.057	0.718153 0.718448	0.829	0.835913 0.836292	0.683	0.908321 0.908781
	1.299	0.681134 0.681373	1.235	0.712862 0.713117	1.240	0.696989 0.697239	1.046	0.793465 0.793765	1.042	0.765824 0.766123	0.806	0.897120 0.897510	0.649	0.983591 0.984075
	1.296	0.719684 0.719923	1.232	0.753414 0.753669	1.234	0.737422 0.737673	1.036	0.841526 0.841828	1.026	0.814210 0.814514	0.782	0.960146 0.960547	0.615	1.062877 1.063388
	1.294	0.758309 0.758549	1.229	0.794068 0.794324	1.228	0.778045 0.778298	1.025	0.890061 0.890366	1.011	0.863334 0.863643	0.758	1.025114 1.025528	0.582	1.146635 1.147176
	1.291	0.797012 0.797251	1.226	0.834825 0.835081	1.222	0.818861 0.819114	1.015	0.939080 0.939388	0.995	0.913219 0.913532	0.735	1.092126 1.092554	0.548	1.235393 1.235967
	1.288	0.835790 0.836031	1.223	0.875686 0.875942	1.217	0.859871 0.860126	1.005	0.988590 0.988901	0.980	0.963887 0.964206	0.711	1.161337 1.161779	0.515	1.329778 1.330390
	1.286	0.874646 0.874887	1.220	0.916650 0.916907	1.211	0.901077 0.901333	0.995	1.038600 1.038915	0.964	1.015364 1.015687	0.688	1.232877 1.233335	0.482	1.430531 1.431186
	1.283	0.913579 0.913820	1.217	0.957717 0.957976	1.205	0.942481 0.942738	0.985	1.089121 1.089440	0.949	1.067675 1.068004	0.664	1.306909 1.307382	0.449	1.538549 1.539253
	1.281	0.952589 0.952831	1.214	0.998890 0.999149	1.199	0.984083 0.984342	0.975	1.140163 1.140484	0.933	1.120846 1.121181	0.641	1.383622 1.384113	0.416	1.654937 1.655697
	1.278	0.991676 0.991919	1.211	1.040166 1.040425	1.193	1.025886 1.026146	0.965	1.191733 1.192059	0.918	1.174905 1.175245	0.617	1.463195 1.463705	0.383	1.781106 1.781933
	1.276	1.030842 1.031085	1.208	1.081546 1.081806	1.188	1.067892 1.068153	0.955	1.243844 1.244173	0.903	1.229881 1.230227	0.594	1.545875 1.546406	0.350	1.918893 1.919799
[1.273	1.070085 1.070329	1.204	1.123029 1.123290	1.182	1.110103 1.110365	0.945	1.296506 1.296838	0.887	1.285805 1.286157	0.570	1.631889 1.632442	0.317	2.070728 2.071730
[1.271	1.109407 1.109651	1.201	1.164618 1.164880	1.176	1.152519 1.152783	0.935	1.349727 1.350062	0.872	1.342713 1.343071	0.547	1.721545 1.722122	0.284	2.239913 2.241037
	1.268	1.148808 1.149052	1.198	1.206313 1.206576	1.170	1.195143 1.195408	0.925	1.403516 1.403856	0.856	1.400642 1.401006	0.523	1.815157 1.815761	0.250	2.431183 2.432465
[1.265	1.188287 1.188532	1.195	1.248116 1.248379	1.165	1.237979 1.238245	0.915	1.457887 1.458230	0.841	1.459625 1.459997	0.500	1.913083 1.913715	0.217	2.651620 2.653117
[1.263	1.227846 1.228091	1.192	1.290028 1.290291	1.159	1.281025 1.281293	0.905	1.512853 1.513200	0.825	1.519703 1.520081	0.476	2.015761 2.016424	0.183	2.912518 2.914321
[1.260	1.267484 1.267729	1.189	1.332049 1.332313	1.154	1.324286 1.324555	0.895	1.568429 1.568780	0.810	1.580920 1.581306	0.452	2.123669 2.124367	0.149	3.234093 3.236382
	1.258	1.307201 1.307447	1.186	1.374180 1.374444	1.148		0.885	1.624629 1.624984	0.794	1.643323 1.643717	0.429	2.237391 2.238129	0.114	3.660728 3.663965
	1.255	1.346999 1.347245	1.183	1.416421 1.416687	1.142		0.875	1.681463 1.681822	0.779	1.706956 1.707358	0.405	2.357619 2.358400	0.102	4.357060 4.364328
	1.253	1.386876 1.387123	1.180	1.458773 1.459039	1.136		0.865	1.738948 1.739310	0.763	1.771869 1.772278	0.381	2.485181 2.486011	0.095	5.084563 5.089126
	1.250	1.426834 1.427081	1.176	1.501236 1.501504	1.131		0.855	1.797092 1.797458	0.748	1.838108 1.838526	0.357	2.621073 2.621960	0.061	5.763386 5.765268
	1.248	1.466872 1.467120	1.173	1.543812 1.544080	1.125	1.543858 1.544134	0.846	1.855905 1.856276	0.733	1.905727 1.906153	0.333	2.766515 2.767467	0.031	6.314564
	1.245	1.506991 1.507240	1.170	1.586500 1.586769	1.119		0.836	1.915384 1.915760	0.717	1.974770 1.975205	0.308	2.922978 2.924003		
	1.243	1.547192 1.547441	1.167	1.629301 1.629571	1.113	1.633255 1.633534	0.826	1.975564 1.975945	0.702	2.045296 2.045741	0.284	3.092292 3.093407		
	1.240	1.587473 1.587723	1.164	1.672216 1.672487	1.108	1.678299 1.678579	0.816	2.036466	0.687	2.117366 2.117821	0.260	3.276810 3.278030		
	1.237	1.627836	1.161	1.715246 1.715517	1.102	1.723576 1.723857	0.807	2.098100	0.672	2.191047 2.191513	0.235	3.479628 3.480977		
	1.235	1.668281	1.158	1.758390 1.758661	1.096		0.797	2.160494 2.160888	0.657	2.266412 2.266888	0.211	3.704990 3.706497		
	1.232	1.708808 1.709059	1.155	1.801650 1.801922	1.090		0.787	2.223670 2.224069	0.641	2.343540 2.344028	0.186	3.958898 3.960610		
	1.230	1.749417 1.749669	1.151	1.801922 1.845026 1.845299	1.085	1.860827	0.777	2.287657	0.626	2.422522	0.161	4.250192 4.252180		
	1.227	1.790108	1.148	1.888519	1.079	1.861112 1.907058	0.767	2.288061	0.611	2.423022 2.503464	0.135	4.592782		
j	1.225	1.790361 1.830883	1.145	1.888792 1.932128	1.074	1.907346 1.953535	0.757	2.352877 2.418118	0.596	2.503977 2.586468	0.109	4.595162 5.010931		

	4.00440.6		4.000400		4.050004		0.440500		0.500004	T suppers
1.222	1.831136 1.871740	1.142	1.932403 1.975855	1.068	1.953824 2.000259	0.747	2.418533 2.484642	0.580	2.586994 2.671645	5.013915 0.082 5.555045
1.220	1.871994	1.139	1.976130 2.019700	1.062	2.000550 2.047233	0.737	2.485062 2.552040	0.564	2.672185 2.759114	5.559145 0.062 6.378240
1.220	1.912681 1.912935	1.139	2.019700	1.062	2.047233	0./3/	2.552467	0.564	2.759114	0.062 6.378240
1.217	1.953705 1.953960	1.136	2.063662 2.063939	1.057	2.094459 2.094753	0.728	2.620352	0.550	2.848999 2.849570	
1.215	1.994814	1.133	2.107743	1.051	2.141941	0.718	2.620784 2.689588	0.534	2.941437	
1.213	1.995068 2.036006	1.130	2.108020 2.151943	1.045	2.142236 2.189679	0.708	2.690026 2.759780	0.519	2.942023 3.036567	
	2.036261		2.152221		2.189976		2.760224		3.037171	
1.210	2.077282 2.077538	1.127	2.196262 2.196541	1.039	2.237678 2.237977	0.698	2.830959 2.831409	0.503	3.134541 3.135163	
1.208	2.118644	1.124	2.240702	1.034	2.285939	0.688	2.903151	0.488	3.235521	
1.205	2.118900 2.160090	1.121	2.240981 2.285263	1.028	2.286240 2.334467	0.678	2.903608 2.976389	0.473	3.236163 3.339703	
	2.160347		2.285543		2.334769		2.976853		3.340365	
1.203	2.201621 2.201879	1.118	2.329945 2.330226	1.022	2.383262 2.383566	0.668	3.050706 3.051176	0.458	3.447288 3.447972	
1.200	2.243239	1.115	2.374749	1.017	2.432328	0.658	3.126139 3.126617	0.443	3.558527	
1.198	2.243497 2.284942	1.112	2.375031 2.419677	1.011	2.432634 2.481667	0.648	3.126617	0.427	3.559235 3.673688	
1.195	2.285201 2.326732	1.109	2.419959 2.464728	1.006	2.481975 2.531284	0.638	3.203204 3.280488	0.412	3.674421 3.793060	
	2.326991		2.465011		2.531593		3.280981		3.793819	
1.193	2.368609 2.368869	1.106	2.509902 2.510187	1.000	2.581180 2.581490	0.628	3.359469 3.359970	0.397	3.916982 3.917772	
1.190	2.410572	1.103	2.555202	0.994	2.631358	0.619	3.439727	0.381	4.045876	
1.188	2.410832 2.452623	1.100	2.555487 2.600628	0.989	2.631670 2.681821	0.609	3.440236 3.521282	0.365	4.046697 4.180179	
	2.452883		2.600914		2.682135		3.521799		4.181036	
1.185	2.494761 2.495022	1.097	2.646180 2.646466	0.983	2.732572 2.732888	0.599	3.604192 3.604718	0.350	4.320389 4.321285	
1.183	2.536987	1.094	2.691859	0.978	2.783615	0.589	3.688498	0.334	4.467065	
1.180	2.537249 2.579301	1.091	2.692147 2.737666	0.972	2.783933 2.834951	0.579	3.689033 3.774252	0.318	4.468002 4.620846	
	2.579563		2.737955		2.835271		3.774797		4.621831	
1.178	2.621703 2.621966	1.088	2.783602 2.783891	0.966	2.886586 2.886907	0.569	3.861508 3.862061	0.302	4.782485 4.783522	
1.176	2.664194 2.664457	1.085	2.829667	0.961	2.938520	0.558	3.950326	0.286	4.952866	
1.173	2.664457	1.081	2.829957 2.875861	0.955	2.938844 2.990759	0.548	3.950890 4.040770	0.271	4.953961 5.133029	
	2.707038		2.876151	0.950	2.991084	0.538	4.041344 4.132906	0.255	5.134188	
1.171	2.749444 2.749709	1.078	2.922185 2.922477		3.043305 3.043632		4.133491		5.324205 5.325437	
1.168	2.792203 2.792468	1.075	2.968641 2.968933	0.944	3.096162 3.096491	0.528	4.226788 4.227385	0.239	5.527905 5.529222	
1.166	2.835052	1.072	3.015228	0.938	3.149335	0.518	4.322495	0.222	5.745939	
1.163	2.835318 2.877991	1.069	3.015521 3.061947	0.933	3.149666 3.202826	0.508	4.323103 4.420095	0.206	5.747353 5.980552	
	2.878258		3.062241		3.203159		4.420716		5.982077	
1.161	2.921021 2.921288	1.066	3.108800 3.109095	0.927	3.256639 3.256974	0.498	4.519666 4.520299	0.190	6.234648 6.236307	
1.159	2.964141	1.063	3.155786	0.922	3.310778	0.488	4.621293	0.174	6.512020	
1.156	2.964409 3.007353	1.060	3.156082 3.202907	0.916	3.311115 3.365247	0.477	4.621939 4.725063	0.157	6.513840 6.817757	
	3.007621		3.203204		3.365587		4.725723		6.819775	
1.154	3.050656 3.050924	1.057	3.250163 3.250460	0.910	3.420051 3.420392	0.467	4.831072 4.831747	0.140	7.159012 7.161283	
1.151	3.094051 3.094320	1.054	3.297555	0.905	3.475192	0.457	4.939423	0.123	7.546230	
1.149	3.137538	1.051	3.297853 3.345082	0.899	3.475536 3.530676	0.447	4.940112 5.050221	0.105	7.548834 7.995711	
1.146	3.137808 3.181118	1.048	3.345382 3.392747	0.894	3.531021 3.586505	0.437	5.050927 5.163589	0.086	7.998785 8.535908	
	3.181388		3.393047		3.586853		5.164311		8.539704	
1.144	3.224790 3.225061	1.045	3.440549 3.440850	0.888	3.642685 3.643035	0.427	5.279655 5.280395	0.067	9.225221 9.230322	
1.142	3.268555	1.042	3.488490	0.883	3.699219	0.416	5.398550	0.071	10.237627	
1.139	3.268826 3.312414	1.039	3.488791 3.536569	0.877	3.699571 3.756112	0.406	5.399308 5.520418	0.050	10.246677 11.085588	
	3.312686		3.536871		3.756466		5.521195			
1.137	3.356366 3.356639	1.036	3.584788 3.585092	0.871	3.813367 3.813723	0.396	5.645409 5.646206			
1.134	3.400413 3.400686	1.033	3.633147	0.866	3.870988	0.386	5.773692			
1.132	3.444553	1.030	3.633452 3.681648	0.861	3.871347 3.928980	0.375	5.774511 5.905450			
1.129	3.444827 3.488788	1.027	3.681953 3.730290	0.855	3.929342 3.987348	0.365	5.906292 6.040905			
	3.489063		3.730596		3.987712		6.041771			
1.127	3.533118 3.533392	1.024	3.779075 3.779382	0.849	4.046095 4.046461	0.355	6.180284 6.181175			
1.124	3.577542	1.021	3.828003	0.844	4.105227	0.344	6.323828			
1.122	3.577818 3.622061	1.018	3.828310 3.877075	0.839	4.105595 4.164747	0.334	6.324747 6.471798			
1.120	3.622337 3.666676	1.015	3.877384 3.926292	0.833	4.165117 4.224660	0.324	6.472746 6.624480			
	3.666952		3.926602		4.225033		6.625458			
1.117	3.711386 3.711663	1.012	3.975655 3.975966	0.827	4.284973 4.285349	0.313	6.782187 6.783197			
1.115	3.756192	1.009	4.025163	0.822	4.345691	0.303	6.945288			
1.112	3.756470 3.801095	1.006	4.025475 4.074820	0.816	4.346070 4.406819	0.292	6.946333 7.114181			
	3.801373		4.075132		4.407200		7.115264			
1.110	3.846094 3.846373	1.003	4.124623 4.124936	0.811	4.468363 4.468747	0.282	7.289322 7.290447			
1.108	3.891191	1.000	4.174576	0.805	4.530328	0.271	7.471222			
1.105	3.891470 3.936384	0.997	4.174891 4.224678	0.800	4.530714 4.592719	0.261	7.472390 7.660467			
	3.936664		4.224994		4.593108		7.661684			
1.103	3.981676 3.981957	0.994	4.274931 4.275248	0.794	4.655544 4.655935	0.250	7.857710 7.858980			
1.100	4.027065 4.027347	0.991	4.325335 4.325653	0.789	4.718806 4.719200	0.239	8.063740			
1.098	4.027347	0.988	4.325653 4.375892	0.784	4.782514	0.228	8.065069 8.279457			
1.096	4.072835 4.118140	0.985	4.376211 4.426602	0.778	4.782910 4.846672	0.218	8.280850 8.505888			
	4.118423		4.426921		4.847072		8.507352			
1.093	4.163826 4.164109	0.982	4.477466 4.477786	0.773	4.911287 4.911690	0.207	8.744258 8.745803			
1.091	4.209611	0.979	4.528484	0.767	4.976366	0.195	8.996075			
1.089	4.209895 4.255496	0.976	4.528806 4.579658	0.762	4.976771 5.041914	0.184	8.997711 9.263202			
	4.255780		4.579981		5.042322		9.264942			
1.086	4.301481 4.301766	0.973	4.630989 4.631312	0.756	5.107939 5.108351	0.173	9.547914 9.549773			
1.084	4.347566	0.970	4.682475	0.750	5.174448	0.162	9.853082			

	4247052		4.602000		F 174062
1.081	4.347852 4.393753	0.967	4.682800 4.734120	0.745	5.174862 5.241447
1.079	4.394039 4.440040	0.964	4.734446 4.785923	0.740	5.241865 5.308945
	4.440328		4.786250		5.309367
1.077	4.486429 4.486718	0.961	4.837885 4.838212	0.734	5.376949 5.377373
1.074	4.532921	0.958	4.890005	0.729	5.445466
1.072	4.533209 4.579514	0.956	4.890333 4.942286	0.723	5.445893 5.514502
	4.579803	0.050	4.942616		5.514933
1.070	4.626210 4.626500	0.953	4.994727 4.995057	0.718	5.584067 5.584501
1.067	4.673010 4.673299	0.950	5.047333 5.047664	0.712	5.654169 5.654607
1.065	4.719912	0.947	5.100102	0.707	5.724816
1.063	4.720203 4.766918	0.944	5.100435 5.153040	0.701	5.725257 5.796016
	4.767210		5.153374		5.796460
1.060	4.814028 4.814321	0.941	5.206143 5.206477	0.696	5.867777 5.868226
1.058	4.861243	0.938	5.259416	0.690	5.940110
1.056	4.861536 4.908562	0.935	5.259752 5.312856	0.685	5.940561 6.013022
1.053	4.908856 4.955987	0.932	5.313193 5.366468	0.679	6.013477 6.086524
	4.956281		5.366806		6.086982
1.051	5.003517 5.003812	0.929	5.420250 5.420590	0.674	6.160623 6.161085
1.049	5.051154	0.926	5.474207	0.669	6.235330
1.046	5.051449 5.098896	0.923	5.474547 5.528336	0.663	6.235796
	5.099192		5.528676		6.311124
1.044	5.146745 5.147042	0.920	5.582640 5.582982	0.658	6.386605 6.387079
1.042	5.194701 5.194999	0.917	5.637118 5.637462	0.652	6.463195 6.463673
1.039	5.194999	0.914	5.637462	0.647	6.540436
1.037	5.243063 5.290936	0.911	5.692120 5.746608	0.641	6.540918 6.618338
	5.291235		5.746954		6.618824
1.035	5.339216 5.339516	0.908	5.801620 5.801967	0.636	6.696913 6.697404
1.032	5.387604	0.905	5.856811	0.630	6.776172
1.030	5.387905 5.436102	0.902	5.857160 5.912184	0.625	6.776667 6.856127
	5.436403		5.912532		6.856626
1.028	5.484710 5.485011	0.899	5.967736 5.968086	0.620	6.936788 6.937292
1.025	5.533427	0.896	6.023471	0.614	7.018166
1.023	5.533729 5.582255	0.893	6.023822 6.079387	0.609	7.018674 7.100282
1.021	5.582558 5.631193	0.891	6.079740 6.135487	0.603	7.100795 7.183150
	5.631497		6.135841		7.183668
1.019	5.680243 5.680547	0.888	6.191769 6.192124	0.598	7.266785 7.267308
1.016				0.500	
1.010	5.729404	0.885	6.248239	0.592	7.351206
	5.729709		6.248595		7.351734
1.014	5.729709 5.778678 5.778984	0.882	6.248595 6.304894 6.305251	0.587	7.351734 7.436430 7.436963
	5.729709 5.778678		6.248595 6.304894		7.351734 7.436430
1.014	5.729709 5.778678 5.778984 5.828064 5.828371 5.877564	0.882	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769	0.587	7.351734 7.436430 7.436963 7.522471 7.523009 7.609344
1.014	5.729709 5.778678 5.778984 5.828064 5.828371 5.877564 5.877871 5.927176	0.882	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.475989	0.587 0.581	7.351734 7.436430 7.436963 7.522471 7.523009 7.609344 7.609888 7.697066
1.014 1.012 1.009	5.729709 5.778678 5.778984 5.828064 5.828371 5.877564 5.877871 5.927176	0.882 0.879 0.876 0.873	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.475989 6.476350	0.587 0.581 0.576 0.570	7.351734 7.436430 7.436963 7.522471 7.523009 7.609344 7.609888 7.697066 7.697614
1.014 1.012 1.009 1.007	5.729709 5.778678 5.778984 5.828064 5.828371 5.877564 5.877871 5.927176 5.927484 5.976903 5.977211	0.882 0.879 0.876 0.873	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.475989 6.476350 6.533400 6.533762	0.587 0.581 0.576 0.570 0.565	7.351734 7.436430 7.436963 7.522471 7.5223009 7.609344 7.609888 7.697066 7.697614 7.785649 7.786203
1.014 1.012 1.009	5.729709 5.778678 5.778984 5.828064 5.828371 5.877564 5.877871 5.927176 5.927484 5.976903	0.882 0.879 0.876 0.873	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.475989 6.476350 6.533400	0.587 0.581 0.576 0.570	7.351734 7.436430 7.436963 7.522471 7.523009 7.609344 7.609888 7.697066 7.697614 7.785649
1.014 1.012 1.009 1.007	5.729709 5.778678 5.778678 5.878984 5.828371 5.877564 5.9271476 5.927484 5.976903 5.977211 6.026743 6.02763 6.027699	0.882 0.879 0.876 0.873	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.47589 6.47589 6.533762 6.533762 6.591002 6.591365 6.648798	0.587 0.581 0.576 0.570 0.565	7.351734 7.436430 7.436430 7.522471 7.523009 7.609344 7.60988 7.697066 7.697614 7.785649 7.786203 7.875117 7.875677 7.965487
1.014 1.012 1.009 1.007 1.005	5.729709 5.778678 5.778984 5.828364 5.828371 5.877564 5.877871 5.927176 5.927484 5.976903 5.977211 6.026743 6.027053	0.882 0.879 0.876 0.873 0.870	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.479128 6.475989 6.476350 6.533762 6.591365	0.587 0.581 0.576 0.570 0.565	7.351734 7.436430 7.436963 7.522471 7.523009 7.609344 7.609888 7.697066 7.697614 7.785649 7.786203 7.875117 7.875677
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998	5.729709 5.778678 5.778678 5.828064 5.828371 5.877564 5.927484 5.976903 5.977211 6.026743 6.027053 6.076699 6.077009 6.126770 6.127081	0.882 0.879 0.876 0.873 0.870 0.867 0.864	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.475989 6.476350 6.533762 6.591002 6.591002 6.591062 6.649162 6.706787 6.707153	0.587 0.581 0.576 0.570 0.565 0.559 0.554	7.351734 7.436430 7.436963 7.522471 7.523009 7.609344 7.609888 7.697066 7.697614 7.785649 7.786203 7.875117 7.875677 7.9655487 7.966052 8.055776
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996	5.729709 5.778678 5.778678 5.828064 5.828371 5.877564 5.927176 5.9271484 5.976903 6.026743 6.026743 6.02703 6.077009 6.126770 6.127081 6.179957 6.177268	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861	6.248595 6.304894 6.305251 6.361737 6.361936 6.419128 6.475989 6.476350 6.533400 6.533762 6.591002 6.591002 6.70673 6.707153 6.707153 6.707457 6.704971 6.764971 6.765338	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548	7.351734 7.436430 7.436963 7.522471 7.523009 7.609344 7.609888 7.697066 7.697614 7.785649 7.786203 7.875617 7.965487 7.966052 8.056776 8.057347 8.149005
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998	5.729709 5.778678 5.778678 5.778984 5.828064 5.828371 5.877564 5.972146 5.927484 5.976903 6.027053 6.076699 6.077009 6.126770 6.127081 6.172081 6.172081 6.172081 6.172081	0.882 0.879 0.876 0.873 0.870 0.867 0.864	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.479389 6.476350 6.533400 6.5333762 6.591002 6.591365 6.648798 6.649162 6.706787 6.706787 6.764971 6.765338 6.823353	0.587 0.581 0.576 0.570 0.565 0.559 0.554	7.351734 7.436430 7.436963 7.522471 7.523009 7.609344 7.699888 7.697066 7.697614 7.785649 7.785203 7.875117 7.875677 7.9655487 7.966052 8.055776 8.149005 8.149581 8.242193
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996	5.729709 5.778678 5.778678 5.778974 5.828064 5.828371 5.877564 5.927176 5.9271484 5.976903 6.026743 6.027653 6.076699 6.127081 6.127081 6.127081 6.1779268 6.227259 6.227571 6.227576	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.476350 6.533400 6.533762 6.591002 6.591365 6.648798 6.649162 6.706787 6.707153 6.764971 6.765338 6.823353 6.823353 6.823722 6.831934	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548	7.351734 7.436430 7.436963 7.522471 7.523009 7.609344 7.609888 7.697066 7.697614 7.785649 7.786203 7.875117 7.965052 8.056776 8.057347 8.149005 8.149581 8.242193 8.242193 8.3436363
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996	5.729709 5.778678 5.778678 5.778974 5.828064 5.877564 5.877564 5.9727146 5.927484 5.97693 5.977211 6.026743 6.027053 6.076099 6.126770 6.127081 6.176957 6.17268 6.27259 6.227259	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.864	6.248595 6.304894 6.305251 6.361737 6.362096 6.419128 6.475989 6.476350 6.533762 6.591002 6.591002 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153 6.707153	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.542 0.537	7.351734 7.436430 7.436963 7.522471 7.523009 7.609344 7.609388 7.697066 7.697614 7.785649 7.786203 7.875617 7.965487 7.966052 8.056776 8.057347 8.149005 8.149581 8.242193 8.242176
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.993 0.991 0.989	5.729709 5.778678 5.778678 5.878674 5.828064 5.873771 5.877564 5.972146 5.927484 5.976903 5.977211 6.026743 6.027053 6.076699 6.127081 6.127081 6.179957 6.177268 6.227259 6.227579 6.277678 6.277678 6.277971 6.328215 6.328528	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.476350 6.533400 6.533400 6.533400 6.533702 6.591002 6.591062 6.591062 6.59165 6.648798 6.649162 6.7067338 6.823353 6.823722 6.881934 6.882304 6.8940714	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531	7.351734 7.436430 7.436963 7.522471 7.523009 7.609344 7.609888 7.697066 7.785649 7.785603 7.875117 7.875677 8.057347 8.149005 8.242193 8.242193 8.242193 8.336952 8.336952 8.431536
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.993 0.991 0.986	5.729709 5.778678 5.778678 5.778974 5.828064 5.87371 5.877564 5.877871 5.927176 5.927484 5.976903 6.026743 6.027053 6.076699 6.077009 6.127081 6.127081 6.127081 6.127951 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.277578 6.277591 6.27858 6.278586 6.278586 6.378868 6.378868	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853	6.248595 6.304894 6.305251 6.361737 6.361937 6.419128 6.475989 6.476350 6.533400 6.533762 6.591002 6.591365 6.648798 6.649162 6.706737 6.707153 6.7649711 6.765338 6.823372 6.881934 6.882304 6.940714 6.941086 6.999696 6.999696	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531 0.526	7,351734 7,436430 7,436430 7,522471 7,523009 7,609344 7,609388 7,697066 7,697614 7,785649 7,786203 7,875117 7,965487 7,966052 8,055776 8,057347 8,149005 8,149581 8,242193 8,242193 8,242193 8,336952 8,336952 8,431536 8,432131 8,52735 8,528336
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.993 0.991 0.989	5.729709 5.778678 5.778678 5.828064 5.828371 5.877564 5.8277871 5.927146 5.927484 5.976903 5.977211 6.026743 6.027053 6.076699 6.126770 6.127081 6.177268 6.227257 6.277678 6.27757 6.277678 6.277578 6.277678 6.277578 6.277678 6.277578 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853	6.248595 6.304894 6.305251 6.361737 6.362096 6.419128 6.475989 6.475989 6.476350 6.533762 6.591002 6.591002 6.706787 6.707153 6.764971 6.765338 6.823722 6.881934 6.940714 6.940714 6.999696 7.000068	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531	7.351734 7.436430 7.436430 7.522471 7.522471 7.609344 7.609388 7.697066 7.697614 7.785649 7.786203 7.875117 7.965487 7.966052 8.056776 8.056776 8.057347 8.242193 8.242176 8.336363 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581 8.349581
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.993 0.991 0.986	5.729709 5.778678 5.778678 5.778974 5.828064 5.828371 5.877564 5.927484 5.927176 5.927484 5.976903 6.026743 6.027053 6.076699 6.077009 6.127081 6.127081 6.127981 6.127976 6.127767 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853	6.248595 6.304894 6.305251 6.361737 6.361936 6.419128 6.475989 6.476350 6.533400 6.533762 6.591002 6.591365 6.649162 6.706737 6.707153 6.764971 6.765338 6.823372 6.881934 6.881934 6.940714 6.941086 6.99696 6.99696 7.058879 7.059252 7.118264	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531 0.526	7,351734 7,436430 7,436430 7,522471 7,523009 7,609344 7,609888 7,697066 7,697614 7,785649 7,786203 7,875117 7,965487 7,966052 8,055776 8,057347 8,149005 8,242193 8,242193 8,242193 8,242193 8,336952 8,431536 8,432131 8,527355 8,528336 8,528336 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.996 0.998 0.988 0.984	5.729709 5.778678 5.778678 5.778974 5.828064 5.8778671 5.877564 5.877871 5.927484 5.927484 5.977211 6.026743 6.027673 6.076699 6.077009 6.127081 6.176987 6.177268 6.227257 6.227571 6.277678 6.227571 6.277678 6.277678 6.277678 6.277678 6.277878 6.277898 6.277898 6.277898 6.2789886 6.379183 6.429639	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.853 0.850 0.847 0.844	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.475989 6.476350 6.533460 6.533762 6.591002 6.591365 6.648798 6.649162 6.707153 6.764971 6.765338 6.823353 6.8233722 6.881934 6.940714 6.941086 6.999696 7.000688 7.0058879 7.0558252	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.542 0.537 0.531 0.526 0.520 0.515	7,351734 7,436430 7,436430 7,522471 7,523009 7,609344 7,609384 7,697614 7,785649 7,786203 7,875117 7,965487 7,966052 8,057347 8,149005 8,149581 8,242193 8,242193 8,242193 8,336363 8,336952 8,431536 8,43131 8,52735 8,528336 8,624983 8,625592
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.993 0.991 0.989 0.986 0.984 0.982	5.729709 5.778678 5.778678 5.828064 5.828371 5.877564 5.8277871 5.927146 5.927176 5.927176 6.927053 6.076099 6.126770 6.127081 6.177089 6.127081 6.277259 6.27571 6.277678 6.27757 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277679 6.328215 6.378868 6.379183 6.429639 6.480845 6.531837 6.531837	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853 0.850 0.844 0.841 0.838	6.248595 6.304894 6.305251 6.361737 6.362096 6.419128 6.475989 6.475380 6.533762 6.591002 6.591002 6.706787 6.707153 6.764971 6.765338 6.823722 6.881934 6.940714 6.999696 7.000068 7.00068 7.058879 7.17852 7.118639 7.17863 7.17863 7.17863	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.542 0.537 0.531 0.526 0.520 0.515	7.351734 7.436430 7.436430 7.436963 7.522471 7.523009 7.609344 7.609384 7.697614 7.785649 7.786203 7.875117 7.965487 7.966052 8.056776 8.056776 8.057347 8.149005 8.149005 8.149005 8.242176 8.336363 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242173 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.242174 8.2
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.996 0.998 0.988 0.984	5.729709 5.778678 5.778678 5.778974 5.828064 5.8778671 5.877564 5.877871 5.927176 5.927484 5.976903 6.026743 6.027753 6.076699 6.077009 6.127081 6.127081 6.176957 6.177268 6.227257 6.227571 6.277678 6.277678 6.277991 6.328528 6.37868 6.379183 6.429639 6.429639 6.429955 6.480845 6.480845	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.853 0.850 0.847 0.844	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.475989 6.476350 6.533400 6.533762 6.591002 6.591365 6.648798 6.649162 6.706787 6.707153 6.823353 6.823372 6.891934 6.892304 6.940714 6.941086 7.00068 7.058879 7.059252 7.118264 7.118639 7.177853	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.542 0.537 0.531 0.526 0.520 0.515	7,351734 7,436430 7,436430 7,522471 7,523009 7,609344 7,609388 7,697066 7,697614 7,785649 7,785649 7,786549 7,786549 7,966052 8,055776 8,057347 8,14905 8,149581 8,242193 8,242193 8,336952 8,431536 8,43131 8,527735 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,528336 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52836 8,52
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.993 0.991 0.989 0.986 0.984 0.982	5.729709 5.778678 5.778678 5.778678 5.828064 5.828371 5.877564 5.827871 5.927146 5.927486 5.977211 6.026743 5.977211 6.026743 6.027053 6.076099 6.126770 6.127081 6.176957 6.177268 6.277529 6.227571 6.277678 6.277678 6.277678 6.27768 6.378868 6.379183 6.429039 6.429039 6.429039 6.429039 6.480529 6.480529 6.480529 6.480529 6.480529 6.480529 6.531537 6.531537 6.531537 6.531537 6.582665 6.582665	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853 0.850 0.844 0.841 0.838	6.248595 6.304894 6.305251 6.361737 6.362096 6.419128 6.475989 6.475989 6.475340 6.533762 6.591002 6.591365 6.648798 6.649791 6.707153 6.764971 6.765338 6.823722 6.881934 6.940714 6.99696 7.000068 7.059252 7.118264 7.118639 7.177853 7.177823 7.237646 7.238023 7.237646	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.542 0.537 0.531 0.526 0.520 0.515	7,351734 7,436430 7,436430 7,436963 7,522471 7,523009 7,609344 7,609384 7,697614 7,785649 7,786203 7,87517 7,965487 7,965487 7,965487 8,149005 8,149005 8,149581 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242173 8,242174 8,242173 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,242174 8,24
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.993 0.991 0.986 0.984 0.982 0.980 0.977	5.729709 5.778678 5.778678 5.828064 5.827871 5.8277564 5.8277871 5.927146 5.927176 5.927176 6.927053 6.076099 6.126770 6.127081 6.177069 6.127081 6.27259 6.27571 6.277678 6.27757 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.328215 6.378868 6.379183 6.429955 6.480845 6.581537 6.531854 6.582665 6.582982 6.633912 6.634230 6.634230 6.634230	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853 0.850 0.847 0.844 0.841 0.838	6.248595 6.304894 6.305251 6.361737 6.362096 6.419128 6.475989 6.476350 6.533400 6.533360 6.533762 6.591002 6.591365 6.648798 6.649162 6.706787 6.707153 6.823722 6.891934 6.940714 6.765338 6.823722 6.891934 6.940714 6.718639 7.17853 7.178529 7.118639 7.177853 7.178229 7.237646 7.238023 7.297645 7.298024 7.298024	0.587 0.581 0.576 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531 0.526 0.520 0.515 0.509	7,351734 7,436430 7,436430 7,436963 7,522471 7,523009 7,609344 7,609388 7,697066 7,697614 7,785649 7,786203 7,785677 7,965487 7,966052 8,056776 8,149005 8,149005 8,149581 8,242176 8,336363 8,336363 8,336363 8,336363 8,32131 8,527735 8,624983 8,624983 8,624983 8,624983 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,72
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.993 0.991 0.984 0.984 0.982 0.980 0.977	5.729709 5.778678 5.778678 5.778678 5.828064 5.827871 5.8277564 5.8277176 5.927484 5.97593 5.977211 6.026743 6.026743 6.026743 6.027673 6.076699 6.126770 6.127081 6.177268 6.227259 6.227571 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.27868 6.277991 6.328215 6.328528 6.379183 6.429639 6.42955 6.480529 6.480529 6.480529 6.480529 6.531537 6.531854 6.531854 6.531854 6.531854 6.532862 6.633912 6.634230 6.685279	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853 0.850 0.847 0.844 0.841 0.838 0.835	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.475989 6.476350 6.533762 6.591002 6.591365 6.648798 6.7674753 6.764971 6.765338 6.823722 6.891365 6.823722 6.891936 6.704153 6.823722 6.891936 6.704971 6.7153 6.725387 7.178239 7.177823 7.178239 7.177853 7.177823 7.177823 7.237646 7.238023 7.237646 7.238024 7.237645 7.298024 7.357852	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531 0.526 0.520 0.515 0.509 0.498	7,351734 7,436430 7,436430 7,436963 7,522471 7,523009 7,609344 7,609388 7,697066 7,697614 7,785649 7,786203 7,875617 7,965487 7,965487 7,965487 7,966052 8,056776 8,057347 8,149058 8,149581 8,242176 8,336363 8,242176 8,336363 8,431536 8,431536 8,431536 8,432131 8,527735 8,528336 8,62592 8,723304 8,723304 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,723301 8,72
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.996 0.998 0.980 0.982 0.980 0.987 0.977	5.729709 5.778678 5.778678 5.778678 5.828064 5.827871 5.8277564 5.827871 5.927146 5.927176 5.927176 6.026743 6.026743 6.027053 6.076099 6.126770 6.127081 6.176957 6.177268 6.227257 6.277678 6.277678 6.277678 6.277678 6.27768 6.27868 6.378868 6.379183 6.429055 6.480529 6.480529 6.480529 6.480529 6.480529 6.480529 6.480529 6.480529 6.634230 6.681598 6.634230 6.685598 6.737086 6.737086	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.859 0.853 0.850 0.847 0.844 0.841 0.838 0.835 0.832	6.248595 6.304894 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.476350 6.533400 6.533400 6.533762 6.591002 6.591365 6.648798 6.707153 6.764971 6.765338 6.823722 6.881934 6.941086 6.999696 7.000068 7.058879 7.05252 7.118264 7.118639 7.177853 7.177853 7.177853 7.1778229 7.237646 7.238023 7.297645 7.298024 7.237646 7.238023 7.358232 7.358232 7.418267	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531 0.526 0.520 0.515 0.509 0.504 0.498 0.492 0.487	7,351734 7,436430 7,436430 7,436430 7,436963 7,522471 7,523009 7,609344 7,609344 7,609364 7,697614 7,785649 7,786203 7,875677 7,965487 7,966052 8,056776 8,057347 8,149005 8,149005 8,149005 8,149005 8,149581 8,242176 8,336363 8,242176 8,336363 8,242131 8,52775 8,528336 8,432131 8,527735 8,528336 8,432131 8,527735 8,528336 8,432131 8,527735 8,528336 8,23296 8,723304 8,723919 8,822724 8,823346 8,923867 8,923895 9,025595 9,025595 9,025595 9,025595 9,127827 9,128470 9,231894
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.993 0.991 0.984 0.984 0.982 0.980 0.977	5.729709 5.778678 5.778678 5.778678 5.828064 5.827871 5.877564 5.827176 5.927484 5.927484 5.977211 6.026743 6.027753 6.076699 6.077009 6.127081 6.17268 6.227257 6.177268 6.227257 6.277678 6.277678 6.277678 6.277678 6.328528 6.379183 6.429639 6.429639 6.480529 6.480529 6.480529 6.5318537 6.531854 6.582982 6.633912 6.638279 6.688579 6.688579 6.688579 6.737086 6.737086 6.737086	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853 0.850 0.847 0.844 0.841 0.838 0.835	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.475989 6.476350 6.533460 6.533762 6.591002 6.591365 6.648798 6.649162 6.707153 6.764971 6.765338 6.823372 6.881934 6.940714 6.941086 6.999696 7.00068 7.00068 7.118264 7.118639 7.177853 7.178229 7.237625 7.118264 7.238023 7.297635 7.298024 7.357852 7.357852 7.357852 7.418649 7.418649	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531 0.526 0.520 0.515 0.509 0.498	7,351734 7,436430 7,436430 7,436963 7,522471 7,523009 7,609344 7,609384 7,697614 7,785649 7,786203 7,875617 7,965487 7,965052 8,056776 8,057347 8,149005 8,149581 8,242193 8,242176 8,336363 8,242176 8,336363 8,242173 8,33646 8,336952 8,431536 8,431536 8,432131 8,527735 8,528336 8,62592 8,723304 8,723304 8,723304 8,723304 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,733919 8,733919 8,733919 8,733919
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.996 0.998 0.980 0.982 0.980 0.987 0.977	5.729709 5.778678 5.778678 5.778678 5.828064 5.827871 5.8277564 5.8277564 5.927486 5.927486 6.927953 6.026743 6.026743 6.026743 6.026743 6.026743 6.026743 6.076099 6.126770 6.127081 6.177268 6.227259 6.177268 6.227257 6.277678 6.277678 6.277678 6.277678 6.328215 6.328215 6.328215 6.328215 6.328215 6.328216 6.33912 6.634230 6.682799 6.683298 6.634230 6.685279 6.685598 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736766 6.736866 6.736866 6.736866 6.736866 6.736866 6.736867	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.859 0.853 0.850 0.847 0.844 0.841 0.838 0.835 0.832	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.475380 6.533762 6.591002 6.591365 6.648798 6.707153 6.764971 6.765338 6.823372 6.823722 6.891936 6.999696 7.00068 7.058879 7.059252 7.118264 7.118263 7.178239 7.237646 7.238023 7.178239 7.237646 7.238023 7.277647 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238023 7.277646 7.238024 7.278802 7.358232 7.418269	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531 0.526 0.520 0.515 0.509 0.504 0.498 0.492 0.487	7,351734 7,436430 7,436430 7,436963 7,522471 7,523009 7,609344 7,609888 7,697066 7,697614 7,785649 7,786203 7,875617 7,965487 7,965487 7,965487 8,149005 8,149581 8,242193 8,242193 8,242776 8,336363 8,431536 8,431536 8,431536 8,431536 8,432131 8,527735 8,528336 8,624983 8,625592 8,723304 8,723304 8,7233919 8,822724 8,923267 8,923896 9,024959 9,025595 9,128470 9,231894 9,232546 9,337197 9,337856 9,443765
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.993 0.991 0.989 0.986 0.982 0.980 0.977 0.975 0.973	5.729709 5.778678 5.778678 5.828064 5.8277564 5.8277564 5.8277871 5.927146 5.927176 5.927176 6.927053 6.076099 6.126770 6.127081 6.177069 6.127081 6.177069 6.127081 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.27757 6.328215 6.378868 6.379183 6.429955 6.480529 6.480845 6.581537 6.531854 6.582665 6.582982 6.633912 6.634230 6.685598 6.685598 6.736767 6.737086 6.783765	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853 0.850 0.844 0.841 0.838 0.835 0.832 0.829	6.248595 6.304894 6.305251 6.361737 6.362096 6.419128 6.476350 6.533400 6.533400 6.533400 6.533400 6.533762 6.591002 6.591365 6.648798 6.649162 6.706787 6.707153 6.823722 6.881934 6.940714 6.99696 7.00068 7.00068 7.058879 7.059252 7.118639 7.17853 7.178229 7.237646 7.238023 7.297645 7.298024 7.2598025 7.358232 7.418649 7.478892 7.478892 7.478892 7.478849 7.478892 7.478849	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.542 0.537 0.531 0.526 0.520 0.515 0.509 0.498 0.492 0.487 0.481	7,351734 7,436430 7,436430 7,436430 7,436963 7,522471 7,523009 7,609344 7,609344 7,609349 7,7875649 7,786203 7,7875677 7,965487 7,965487 7,966852 8,056776 8,057347 8,149005 8,149005 8,149005 8,149005 8,149005 8,149581 8,242176 8,336363 8,242178 8,242776 8,336363 8,3432131 8,527735 8,52836 8,432131 8,527735 8,52836 8,432131 8,527735 8,52836 8,23296 8,723919 8,822724 8,723304 8,723919 8,823266 9,024959 9,025955 9,025955 9,127827 9,128470 9,231894 9,232546 9,337197 9,231894 9,232546 9,337197
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.993 0.991 0.984 0.982 0.984 0.982 0.980 0.977 0.975 0.973 0.970 0.968 0.966	5.729709 5.778678 5.778678 5.778678 5.828064 5.827871 5.877564 5.8277176 5.927484 5.97693 5.977211 6.026743 6.027733 6.077093 6.076699 6.077009 6.127081 6.177268 6.227257 6.177268 6.227257 6.277678 6.277678 6.277678 6.277678 6.277678 6.328528 6.37868 6.379183 6.429639 6.480529 6.480529 6.480529 6.480529 6.685279 6.685279 6.685279 6.685279 6.736767 6.736767 6.736767 6.736766 6.788696 6.788795 6.788696 6.788795 6.788696 6.788795 6.788696 6.788796 6.788796 6.788796 6.788796 6.788796 6.788796 6.788796 6.788796 6.788796 6.788796 6.788796 6.788796 6.788796 6.788796 6.788796 6.8840106 6.840427 6.891958	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853 0.850 0.847 0.844 0.841 0.838 0.835 0.832 0.829 0.827 0.824 0.818	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.4775989 6.476350 6.533400 6.533762 6.591002 6.591365 6.648798 6.676373 6.764971 6.765338 6.823372 6.823372 6.823722 6.891934 6.940714 6.941086 6.999696 7.00068 7.058252 7.118264 7.118639 7.177823 7.177823 7.177823 7.178239 7.237646 7.238023 7.418649 7.438649 7.478892 7.478892 7.478892 7.478892 7.478892 7.559722 7.539728 7.5401112 7.600775 7.6001160	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531 0.526 0.520 0.515 0.509 0.504 0.498 0.492 0.487 0.481 0.475 0.470	7,351734 7,436430 7,436430 7,436430 7,436963 7,522471 7,523009 7,609344 7,609388 7,697066 7,697614 7,785649 7,786203 7,875617 7,965487 7,965487 7,965487 7,965487 8,149058 8,149581 8,242176 8,336363 8,431536 8,431536 8,431536 8,431536 8,432131 8,527735 8,528336 8,624983 8,625592 8,723304 8,723304 8,723304 8,723309 8,723304 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 8,723309 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,723509 9,7
1.014 1.012 1.009 1.007 1.005 1.006 1.007 1.008 0.998 0.996 0.993 0.991 0.986 0.980 0.980 0.977 0.975 0.973 0.970 0.968 0.966 0.964	5.729709 5.778678 5.778678 5.778678 5.828064 5.827871 5.8277564 5.8277564 5.927486 5.927486 5.927486 6.026743 6.026743 6.026743 6.026743 6.076099 6.126770 6.127081 6.17268 6.227259 6.177268 6.227257 6.277678 6.277678 6.277678 6.277678 6.277678 6.328215 6.328215 6.328215 6.328215 6.328215 6.328215 6.328215 6.328215 6.33836 6.379183 6.429955 6.480529 6.480529 6.480529 6.683279 6.685279 6.68266 6.582982 6.6333912 6.685279 6.685598 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.7368968 6.736767 6.7368968 6.736767 6.7368968 6.736767 6.7368968 6.736767 6.7368968 6.736767 6.7368968 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.73698988 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.7369898 6.73698988 6.7369898	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853 0.847 0.844 0.841 0.838 0.832 0.829 0.827 0.824 0.816	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.4775989 6.476350 6.533762 6.591002 6.591365 6.648798 6.707153 6.764971 6.765338 6.823372 6.823372 6.82372 6.881934 6.940714 6.941086 6.999696 7.00068 7.058879 7.17853 7.178239 7.237646 7.238023 7.178239 7.237646 7.238023 7.418267 7.418267 7.418267 7.418269 7.478892 7.478892 7.478892 7.478892 7.478892 7.47897 7.539728 7.540112 7.600176	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531 0.526 0.520 0.515 0.509 0.504 0.498 0.492 0.487 0.487 0.475 0.470	7,351734 7,436430 7,436430 7,436430 7,436963 7,522471 7,523009 7,609344 7,609384 7,697614 7,785649 7,786203 7,875617 7,965487 7,965487 7,965487 8,149005 8,149005 8,149581 8,242193 8,242776 8,336363 8,431536 8,431536 8,431536 8,432131 8,527735 8,528336 8,624983 8,625592 8,723304 8,723919 8,822724 8,7233919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 8,723919 9,723894 9,723894 9,723894 9,723894 9,723894 9,737856
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.993 0.991 0.984 0.982 0.984 0.982 0.980 0.977 0.975 0.973 0.970 0.968 0.966	5.729709 5.778678 5.778678 5.778678 5.878674 5.828064 5.8778671 5.877564 5.8277176 5.927484 5.927484 5.976903 6.076699 6.077009 6.126770 6.127081 6.177268 6.227257 6.177268 6.227257 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.277678 6.378266 6.378266 6.378266 6.378266 6.382826 6.688279 6.6885298 6.638420 6.6885298 6.736767 6.737086 6.788696 6.788696 6.788696 6.8840106 6.8840427 6.891958 6.892280 6.849333 6.892280 6.849333 6.944226 6.849333 6.944226	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853 0.850 0.847 0.844 0.841 0.838 0.835 0.832 0.829 0.827 0.824 0.818	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.475989 6.476350 6.533762 6.591002 6.591365 6.648798 6.649162 6.707153 6.764971 6.765338 6.823372 6.881934 6.892304 6.941086 6.999696 7.00068 7.058879 7.178239 7.178239 7.178239 7.178239 7.178239 7.178239 7.178239 7.178239 7.178239 7.178239 7.178239 7.178239 7.178239 7.178239 7.178239 7.237646 7.238023 7.297645 7.238023 7.297645 7.298024 7.357852 7.418649 7.479275 7.539728 7.5400775 7.600775 7.600775 7.600775 7.600775 7.601160 7.662422 7.723510	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531 0.526 0.520 0.515 0.509 0.504 0.498 0.492 0.487 0.481 0.475 0.470	7,351734 7,436430 7,436430 7,522471 7,523009 7,609344 7,609384 7,697614 7,785649 7,786203 7,875617 7,965487 7,966052 8,056776 8,057347 8,149005 8,149581 8,242193 8,242176 8,33695 8,431536 8,432131 8,52735 8,528336 8,624983 8,625592 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723319 8,723319 8,723304 8,723319 8,723304 8,723319 8,723304 8,723319 8,723319 8,723304 8,723319 8,723304 8,723319 8,723304 8,723319 8,723304 8,723319 8,723304 8,723319 8,723304 8,723319 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 9,771373
1.014 1.012 1.009 1.007 1.005 1.006 1.007 1.008 0.998 0.996 0.993 0.991 0.986 0.980 0.980 0.977 0.975 0.973 0.970 0.968 0.966 0.964	5.729709 5.778678 5.778678 5.778678 5.828064 5.827871 5.8277564 5.8277564 5.8277564 5.927484 5.927484 5.927484 5.927484 6.026743 6.026743 6.026743 6.076699 6.126770 6.127081 6.17268 6.227259 6.17268 6.227257 6.277678 6.277678 6.277678 6.27768 6.277691 6.328215 6.328528 6.379183 6.429639 6.42955 6.480529 6.480529 6.480529 6.683279 6.685279 6.685279 6.685298 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736767 6.736896 6.749933 6.944256 6.996031 6.996031	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853 0.847 0.844 0.841 0.838 0.832 0.829 0.827 0.824 0.816	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.475989 6.476350 6.533762 6.591002 6.591365 6.648798 6.7675153 6.764971 6.765338 6.823722 6.881934 6.940714 6.941086 6.999696 7.000688 7.058879 7.178239 7.177823 7.178239 7.178237 7.178239 7.178237 7.178239 7.178237 7.178239 7.178237 7.178239 7.178237 7.178239 7.178237 7.178239 7.178237 7.178237 7.178239 7.178237 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238 7.178238	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531 0.526 0.520 0.515 0.509 0.504 0.498 0.492 0.487 0.487 0.475 0.470	7,351734 7,436430 7,436430 7,436430 7,436430 7,522471 7,523009 7,609344 7,609388 7,697066 7,697614 7,785649 7,786203 7,875617 7,965487 7,965487 7,965487 8,149005 8,149581 8,242193 8,242776 8,336363 8,431536 8,431536 8,431536 8,431536 8,431536 8,431536 8,431536 8,431536 8,431536 8,527735 8,528336 8,624983 8,625592 8,723304 8,723919 8,822724 8,823346 8,723919 8,823346 8,923495 9,024959 9,025595 9,127827 9,231894 9,231894 9,231894 9,337197 9,337856 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,4443765 9,444765 9,444765 9,444765 9,444765 9,444765 9,444765 9,44483
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.991 0.982 0.982 0.982 0.980 0.977 0.975 0.973 0.970 0.968 0.966 0.964 0.961	5.729709 5.778678 5.778678 5.7878984 5.828064 5.827871 5.8277564 5.8277871 5.927146 5.927176 5.927176 6.026743 5.977211 6.026743 6.027053 6.076099 6.126770 6.127081 6.177268 6.277579 6.277579 6.277679 6.328215 6.328215 6.328215 6.328215 6.328216 6.33912 6.634230 6.429955 6.480529 6.480845 6.531537 6.531854 6.582665 6.582962 6.634230 6.685598 6.7837086 6.7837086 6.7837086 6.7837086 6.7837086 6.7837086 6.7837086 6.7837086 6.840427 6.788396 6.788396 6.788396 6.789280 6.891958 6.89280 6.891958 6.89280 6.891958 6.89280 6.9443933 6.944256 6.996031	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.864 0.853 0.850 0.844 0.841 0.838 0.835 0.832 0.827 0.827 0.824 0.818 0.818	6.248595 6.304894 6.304894 6.304894 6.305251 6.361737 6.362096 6.419128 6.475989 6.475989 6.475380 6.533762 6.591002 6.591365 6.648798 6.649162 6.706787 6.707153 6.823722 6.881934 6.940714 6.765338 6.823722 6.881934 6.940714 6.7059252 7.118264 7.118639 7.177853 7.177853 7.177853 7.177853 7.178529 7.237646 7.238023 7.297645 7.298024 7.357825 7.358232 7.418267 7.418649 7.4778975 7.539728 7.478892 7.4778975 7.501160 7.662422 7.723590	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.542 0.537 0.531 0.526 0.520 0.515 0.509 0.504 0.498 0.492 0.487 0.481 0.475 0.470 0.464 0.459	7,351734 7,436430 7,436430 7,436430 7,436963 7,522471 7,522471 7,523009 7,609344 7,609344 7,609348 7,697614 7,785649 7,786203 7,875677 7,965487 7,966052 8,056776 8,057347 8,149005 8,149005 8,149005 8,149581 8,242176 8,336363 8,242176 8,336363 8,242131 8,527735 8,528336 8,432131 8,527735 8,528336 8,432131 8,527735 8,528336 8,24293 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,624983 8,625992 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,723304 8,72356 8,9448765 9,44443765 9,44443765 9,44443765 9,44443765 9,44443765 9,44443765 9,44443765 9,44443765 9,44443765 9,44443765 9,471676 9,771773 9,7716765
1.014 1.012 1.009 1.007 1.005 1.002 1.000 0.998 0.996 0.996 0.997 0.981 0.982 0.982 0.984 0.982 0.986 0.977 0.975 0.975 0.975 0.976 0.966 0.964 0.961 0.959	5.729709 5.778678 5.778678 5.778678 5.828064 5.828371 5.877564 5.8277564 5.8277176 5.927484 5.927484 5.976903 5.977211 6.026743 6.027753 6.076699 6.077009 6.127081 6.17268 6.227257 6.177268 6.227257 6.277678 6.277678 6.277678 6.277678 6.277678 6.277691 6.328528 6.37988 6.379183 6.429639 6.480529 6.480529 6.685279 6.685279 6.685279 6.78766 6.788696 6.788696 6.788696 6.788696 6.840427 6.891958 6.736767 6.737086 6.840427 6.891958 6.736767 6.737086 6.840427 6.891958 6.736767 6.737086 6.840427 6.891958 6.736767 6.737086 6.840427 6.891958 6.736767 6.737086 6.840427 6.891958 6.736767 6.737086 6.840427 6.891958 6.794286 6.894280 6.996335 6.996335 6.996355 7.048577 7.100599 7.100924	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.859 0.856 0.853 0.850 0.847 0.844 0.841 0.832 0.832 0.829 0.827 0.824 0.818 0.816 0.813	6.248595 6.304894 6.305251 6.361737 6.362096 6.418769 6.419128 6.476350 6.533400 6.533762 6.591002 6.591365 6.648798 6.649162 6.707153 6.764971 6.765338 6.823372 6.881934 6.940714 6.941086 6.999696 7.00068 7.00068 7.118264 7.118269 7.177853 7.178229 7.178229 7.23762 7.238023 7.418649 7.238023 7.478892 7.478892 7.478892 7.478892 7.478892 7.479275 7.539728 7.501160 7.662035 7.662422 7.723510 7.723898 7.785588	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.548 0.542 0.537 0.531 0.526 0.520 0.515 0.509 0.504 0.498 0.492 0.487 0.481 0.475 0.470 0.464 0.459 0.453 0.448	7,351734 7,436430 7,436430 7,436430 7,522471 7,523009 7,609344 7,609384 7,697614 7,785649 7,786203 7,875617 7,965487 7,965052 8,057347 8,149058 8,149581 8,242193 8,242776 8,336363 8,431536 8,432131 8,52735 8,528336 8,625592 8,723304 8,723919 8,822724 8,823367 8,723919 8,822724 8,923267 8,923896 9,024959 9,025595 9,127827 9,128470 9,231894 9,231894 9,231894 9,337197 9,337856 9,444432 9,555203 9,660821 9,661504 9,771373 9,772065 9,883232 9,884023 9,984023 9,9884023 9,9884023 9,9884023 9,9884023 9,9884023 9,9884023
1.014 1.012 1.009 1.007 1.005 1.002 1.000 1.000 0.998 0.996 0.993 0.991 0.989 0.980 0.984 0.982 0.980 0.977 0.975 0.975 0.976 0.966 0.966 0.964 0.961 0.959	5.729709 5.778678 5.778678 5.778678 5.828064 5.827871 5.8277564 5.8277564 5.927484 5.927484 5.97693 5.977211 6.026743 6.026743 6.026743 6.076099 6.126770 6.127081 6.176957 6.177268 6.27259 6.227571 6.277678 6.277578 6.277678 6.277678 6.277678 6.277678 6.328215 6.328215 6.328528 6.379183 6.429055 6.480529 6.634230 6.634230 6.634230 6.634230 6.638598 6.736767 6.737086 6.788696 6.788696 6.788696 6.788696 6.840106 6.840427 6.891938 6.892280 6.9439333 6.944256 6.890335 6.9496355 7.048253 7.048253 7.048253	0.882 0.879 0.876 0.873 0.870 0.867 0.864 0.861 0.853 0.850 0.844 0.841 0.838 0.835 0.832 0.829 0.827 0.824 0.821 0.818 0.816	6.248595 6.304894 6.304894 6.304894 6.305251 6.361737 6.362096 6.419128 6.475989 6.475380 6.533400 6.533762 6.591002 6.591365 6.648798 6.649162 6.706787 6.707153 6.823353 6.823722 6.881934 6.940714 6.765338 6.823722 6.881934 6.940714 6.7059252 7.118264 7.218023 7.178529 7.237646 7.238023 7.178529 7.237646 7.238023 7.418267 7.418649 7.478892 7.478922 7.478922 7.478922 7.478972 7.539728 7.539728 7.539728 7.540112 7.600775 7.601160 7.723398 7.785289 7.785280 7.785280 7.785588	0.587 0.581 0.576 0.570 0.565 0.559 0.554 0.542 0.537 0.531 0.526 0.520 0.515 0.509 0.498 0.492 0.487 0.481 0.475 0.470 0.464 0.459 0.453	7,351734 7,436430 7,436430 7,436430 7,436963 7,522471 7,523009 7,609344 7,609384 7,697614 7,785649 7,786203 7,875677 7,965487 7,965487 7,966052 8,056776 8,057347 8,149005 8,149581 8,242176 8,336363 8,431536 8,432131 8,242776 8,336363 8,432131 8,527735 8,528336 8,624983 8,625592 8,723304 8,723919 8,822724 8,923267 8,923896 9,024959 9,025595 9,127827 9,128470 9,231894 9,337197 9,231894 9,337197 9,231894 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,337197 9,3

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0.943	7.364203	0.793	8.159938	0.414	10.586544
	7.364532		8.160336		10.587303
0.941	7.417302 7.417632	0.790	8.223173 8.223572	0.409	10.709410 10.710179
0.938	7.470530	0.787	8.286634	0.403	10.834026
0.026	7.470860	0.704	8.287035	0.207	10.834806
0.936	7.523884 7.524215	0.784	8.350323 8.350725	0.397	10.960446 10.961237
0.934	7.577368	0.782	8.414240	0.391	11.088730
0.932	7.577699 7.630979	0.779	8.414644 8.478389	0.386	11.089533 11.218938
0.932	7.631313	0.779	8.478794	0.566	11.219754
0.929	7.684721	0.776	8.542769	0.380	11.351136
0.927	7.685055 7.738592	0.773	8.543176 8.607383	0.374	11.351963 11.485387
0.727	7.738927	01775	8.607791	0.071	11.486228
0.925	7.792594	0.770	8.672233	0.369	11.621762
0.923	7.792930 7.846727	0.768	8.672643 8.737320	0.363	11.622615 11.760333
	7.847063		8.737731		11.761201
0.920	7.900992	0.765	8.802645	0.357	11.901180
0.918	7.901329 7.955389	0.762	8.803057 8.868210	0.351	11.902062 12.044389
	7.955726		8.868624		12.045287
0.916	8.009917	0.759	8.934018	0.346	12.190049
0.914	8.010256 8.064579	0.756	8.934433 9.000069	0.340	12.190962 12.338252
	8.064919		9.000486		12.339181
0.911	8.119375 8.119715	0.753	9.066366 9.066784	0.334	12.489096 12.490042
0.909	8.119715	0.751	9.066784	0.328	12.490042
	8.174646		9.133330		12.643654
0.907	8.229370 8.229712	0.748	9.199702 9.200124	0.323	12.799150 12.800131
0.905	8.284570	0.745	9.266744	0.317	12.958589
0.000	8.284913	0.740	9.267167	0211	12.959589
0.902	8.339907 8.340250	0.743	9.334037 9.334462	0.311	13.121133 13.122153
0.900	8.395379	0.740	9.401584	0.305	13.286915
0.898	8.395724 8.450990	0.737	9.402011 9.469386	0.299	13.287956 13.456082
0.090	8.451335	0.737	9.469815	0.233	13.457144
0.896	8.506737	0.734	9.537446	0.293	13.628788
0.894	8.507083 8.562624	0.731	9.537876 9.605766	0.287	13.629873 13.805206
0.051	8.562971	0.751	9.606198	0.207	13.806314
0.891	8.618649	0.729	9.674348	0.282	13.985517
0.889	8.618997 8.674814	0.726	9.674782 9.743193	0.276	13.986650 14.169917
	8.675163		9.743628		14.171075
0.887	8.731118 8.731468	0.723	9.812304 9.812741	0.269	14.358593 14.359780
0.885	8.787564	0.720	9.881684	0.264	14.551805
0.002	8.787914	0.710	9.882122	0.250	14.553021
0.883	8.844150 8.844502	0.718	9.951336 9.951776	0.258	14.749808 14.751054
0.880	8.900878	0.715	10.021262	0.252	14.952878
0.878	8.901231 8.957749	0.712	10.021704 10.091465	0.246	14.954157 15.161319
0.070	8.958102	0.712	10.091908	0.240	15.162633
0.876	9.014763	0.709	10.161944	0.239	15.375469
0.874	9.015118 9.071922	0.706	10.162390 10.232704	0.233	15.376820 15.595705
0.07 1	9.072277	0.700	10.233151	0.200	15.597094
0.872	9.129224 9.129580	0.703	10.303745	0.227	15.822452 15.823885
0.869	9.129360	0.701	10.304194 10.375072	0.221	16.056183
	9.187028		10.375522		16.057660
0.867	9.244265 9.244622	0.698	10.446684 10.447137	0.215	16.297419 16.298945
0.865	9.302004	0.695	10.518586	0.208	16.546751
	9.302363		10.519041		16.548329
0.863	9.359891 9.360251	0.692	10.590782 10.591238	0.202	16.804880 16.806516
0.861	9.417926	0.689	10.663276	0.195	17.072556
0.050	9.418286	0.606	10.663734	0.100	17.074255
0.858	9.476109 9.476470	0.686	10.736071 10.736531	0.189	17.350676 17.352443
0.856	9.534442	0.684	10.809170	0.182	17.640247
0.854	9.534804 9.592924	0.681	10.809633 10.882574	0.175	17.642089 17.942526
	9.593288	0.001	10.883038	0.173	17.944452
0.852	9.651557	0.678	10.956287	0.169	18.259059
0.850	9.651921 9.710341	0.675	10.956753 11.030309	0.161	18.261080 18.592051
	9.710707		11.030777		18.594184
0.847	9.769278 9.769643	0.672	11.104646 11.105116	0.153	18.946203 18.948489
0.845	9.769643	0.670	11.105116	0.142	19.331935
	9.828733		11.179770		19.334449
0.843	9.887607 9.887975	0.667	11.254271 11.254746	0.132	19.767168 19.770064
0.841	9.947003	0.664	11.329561	0.123	20.256448
0.000	9.947371	0.004	11.330037	0111	20.259701
0.839	10.006552 10.006922	0.661	11.405181 11.405659	0.114	20.807363 20.811087
0.837	10.066257	0.658	11.481120	0.103	21.468061
0.024	10.066628	0.655	11.481600	0.125	21.472747
0.834	10.126119 10.126491	0.655	11.557398 11.557881	0.125	22.355316 22.362856
0.832	10.186137	0.652	11.634000	0.115	22.995438
0.830	10.186510 10.246313	0.649	11.634485 11.710944	0.180	22.998465 23.572291
	10.246687		11.711431		23.577178
0.828	10.306647	0.647	11.788220	0.174	23.857819
0.826	10.307022 10.367141	0.644	11.788709 11.865840	0.167	23.858416 23.955516
	10.367516		11.866331		23.956137
0.823	10.427793 10.428170	0.641	11.943797 11.944290	0.161	24.057122 24.057768
			11.744/9()	i	47.00//08
0.821	10.428170	0.639	12.022104	0.154	24.163029

0.819	10.488985 10.549582	0.636	12.022600 12.100758	0.147	24.163703 24.273693
0.017	10.549961	0.622	12.101256	0.140	24.274399
0.817	10.610718 10.611097	0.633	12.179768 12.180268	0.140	24.389644 24.390385
0.815	10.672016 10.672397	0.630	12.259128 12.259631	0.133	24.511531 24.512312
0.813	10.733478	0.627	12.338854	0.126	24.640156
0.810	10.733860 10.795103	0.624	12.339359 12.418936	0.119	24.640981 24.776467
0.000	10.795486	0.631	12.419443 12.499390	0.111	24.777345
0.808	10.856894 10.857278	0.621	12.499390	0.111	24.921693 24.922631
0.806	10.918850 10.919235	0.619	12.580213 12.580725	0.103	25.077411 25.078421
0.804	10.980973	0.616	12.661414	0.095	25.245703
0.802	10.981359 11.043263	0.613	12.661928 12.742989	0.086	25.246801 25.429510
	11.043650		12.743506		25.430719
0.800	11.105721 11.106109	0.610	12.824952 12.825470	0.077	25.633074 25.634426
0.798	11.168349	0.607	12.907293	0.068	25.862797
0.795	11.168738 11.231146	0.604	12.907814 12.990028	0.057	25.864345 26.129705
0.793	11.231536 11.294114	0.601	12.990552 13.073152	0.045	26.131544 26.455292
	11.294506		13.073679	0.0 15	20.100272
0.791	11.357255 11.357647	0.599	13.156673 13.157202		
0.789	11.420568	0.596	13.240596		
0.787	11.420962 11.484056	0.593	13.241127 13.324923		
0.705	11.484450	0.500	13.325457		
0.785	11.547717 11.548113	0.590	13.409659 13.410196		
0.782	11.611555 11.611952	0.587	13.494809 13.495349		
0.780	11.675568	0.584	13.580381		
0.778	11.675966 11.739758	0.581	13.580924 13.666375		
	11.740157		13.666920		
0.776	11.804125 11.804525	0.578	13.752794 13.753342		
0.774	11.868670 11.869071	0.576	13.839645 13.840196		
0.772	11.933394	0.573	13.926935		
0.770	11.933797 11.998299	0.570	13.927488 14.014667		
	11.998702		14.015223		
0.767	12.063384 12.063789	0.567	14.102846 14.103406		
0.765	12.128652	0.564	14.191478		
0.763	12.129057 12.194101	0.561	14.192040 14.280567		
0.761	12.194508 12.259735	0.559	14.281132 14.370117		
	12.260143		14.370685		
0.759	12.325554 12.325962	0.556	14.460135 14.460705		
0.757	12.391558	0.553	14.550627		
0.755	12.391968 12.457748	0.550	14.551200 14.641601		
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0.750	12.590693 12.591107	0.544	14.825019 14.825602		
0.748	12.657449	0.541	14.917473		
0.746	12.657864 12.724395	0.538	14.918059 15.010430		
0.744	12.724811 12.791532	0.535	15.011019 15.103894		
0.744	12.791950	0.555	15.103694		
0.742	12.858863 12.859281	0.533	15.197871 15.198467		
0.740	12.926385	0.530	15.292368		
0.738	12.926805 12.994103	0.527	15.292967 15.387389		
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0.736	13.062017 13.062439	0.524	15.482941 15.483548		
0.733	13.130128 13.130550	0.521	15.579031 15.579641		
0.731	13.198436	0.518	15.675664		
0.729	13.198861 13.266943	0.515	15.676277 15.772847		
	13.267369		15.773463		
0.727	13.335651 13.336078	0.512	15.870588 15.871208		
0.725	13.404560 13.404988	0.509	15.968893 15.969516		
0.723	13.473671	0.506	16.067766		
0.721	13.474101 13.542986	0.503	16.068393 16.167212		
	13.543417		16.167843		
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	13.822735		16.571528		
0.710	13.892648 13.893085	0.489	16.673311 16.673960		
0.708	13.963205	0.486	16.776357		
0.706	13.963644 14.033975	0.483	16.777010 16.880029		
0.704	14.034415 14.104956	0.480	16.880686 16.984335		
	14.105398		16.984997		
0.702	14.176152 14.176595	0.477	17.089284 17.089950		
0.699	14.247564	0.474	17.194883		
0.697	14.248008 14.319192	0.471	17.195553 17.301142		

0.695	14.319637 14.391038	0.468	17.301816 17.408071
	14.391484		17.408749
0.693	14.463102 14.463550	0.465	17.515679 17.516361
0.691	14.535387 14.535836	0.462	17.623974 17.624662
0.689	14.607893	0.459	17.732970
0.687	14.608344 14.680621	0.457	17.733661 17.842667
0.007	14.681073		17.843363
0.684	14.753573 14.754026	0.454	17.953075 17.953776
0.682	14.826750	0.451	18.064208
0.680	14.827205 14.900153	0.448	18.064914 18.176079
	14.900610		18.176788
0.678	14.973785 14.974243	0.445	18.288698 18.289413
0.676	15.047645	0.442	18.402076
0.674	15.048104 15.121736	0.439	18.402795 18.516222
0.672	15.122196 15.196058	0.426	18.516946 18.631149
0.672	15.196520	0.436	18.631879
0.670	15.270614 15.271077	0.433	18.746868 18.747602
0.668	15.345403	0.430	18.863388
0.665	15.345868 15.420428	0.427	18.864128 18.980725
	15.420895		18.981471
0.663	15.495690 15.496158	0.424	19.098889 19.099639
0.661	15.571191 15.571660	0.422	19.217893 19.218648
0.659	15.646931	0.419	19.218648
0.657	15.647402	0.415	19.338513
	15.722913 15.723386		19.458486 19.459252
0.655	15.799138 15.799612	0.412	19.580106 19.580878
0.653	15.875607	0.409	19.702624
0.651	15.876083 15.952322	0.407	19.703401 19.826055
	15.952799		19.826838
0.649	16.029284 16.029763	0.404	19.950414 19.951203
0.647	16.106495	0.401	20.075717
0.644	16.106975 16.183956	0.398	20.076512 20.201980
0.642	16.184437	0.394	20.202782 20.329224
0.642	16.261670 16.262153	0.394	20.329224
0.640	16.339638 16.340123	0.391	20.457469 20.458283
0.638	16.417863	0.388	20.586736
0.636	16.418349 16.496345	0.385	20.587556 20.717042
	16.496833		20.717869
0.634	16 575007		
0.634	16.575087 16.575576	0.382	20.848405 20.849240
0.634	16.575576 16.654089	0.382	20.849240 20.980845
	16.575576		20.849240 20.980845 20.981686 21.114373
0.632	16.575576 16.654089 16.654580 16.733354 16.733847	0.379	20.849240 20.980845 20.981686 21.114373 21.115222
0.632 0.630 0.628	16.575576 16.654089 16.654580 16.733354 16.733847 16.812882 16.813377	0.379 0.376 0.373	20.849240 20.980845 20.981686 21.114373 21.115222 21.249016 21.249871
0.632	16.575576 16.654089 16.654580 16.733354 16.733847 16.812882 16.813377 16.892677	0.379	20.849240 20.980845 20.981686 21.114373 21.115222 21.249016 21.249871 21.384796
0.632 0.630 0.628	16.575576 16.654089 16.654580 16.733354 16.733847 16.812882 16.813377 16.892677 16.893173 16.972739	0.379 0.376 0.373	20.849240 20.980845 20.981686 21.114373 21.115222 21.249016 21.249871 21.384796 21.385658 21.521736
0.632 0.630 0.628 0.626	16.575576 16.654089 16.654580 16.733354 16.733847 16.812882 16.813377 16.892677	0.379 0.376 0.373	20.849240 20.980845 20.981686 21.114373 21.115222 21.249016 21.249871 21.384796 21.385658
0.632 0.630 0.628 0.626 0.624	16.575576 16.654089 16.654580 16.733354 16.733847 16.812882 16.893173 16.972739 16.972739 17.053571	0.379 0.376 0.373 0.370 0.367	20.849240 20.980845 20.981686 21.114373 21.115222 21.249871 21.384796 21.321736 21.522606 21.529862 21.660739
0.632 0.630 0.628 0.626 0.624 0.621	16.575576 16.654089 16.654580 16.733354 16.733847 16.812882 16.813377 16.892677 16.893173 16.972739 17.053071 17.053571 17.133674 17.13474	0.379 0.376 0.373 0.370 0.367 0.364	20.849240 20.980845 20.981686 21.114373 21.115222 21.249016 21.384796 21.385658 21.521736 21.522606 21.660739 21.799197 21.800082
0.632 0.630 0.628 0.626 0.624	16.575576 16.654089 16.654580 16.733354 16.733364 16.812882 16.813377 16.892677 16.893173 16.972739 16.973237 17.053071 17.053571 17.133674 17.134176 17.214551	0.379 0.376 0.373 0.370 0.367	20.849240 20.980845 20.981686 21.114373 21.115222 21.249016 21.385658 21.521736 21.522606 21.660739 21.799197 21.800082 21.939771
0.632 0.630 0.628 0.626 0.624 0.621	16.575576 16.654089 16.654580 16.733384 16.733847 16.812882 16.813377 16.892677 16.893173 16.972239 16.973237 17.053571 17.133674 17.134576 17.214551 17.215054 17.295703	0.379 0.376 0.373 0.370 0.367 0.364	20.849240 20.980445 20.981686 21.114373 21.115222 21.249016 21.2384796 21.384796 21.522606 21.552606 21.659862 21.660739 21.799197 21.800082 21.939771 21.940664 22.081610
0.632 0.630 0.628 0.626 0.624 0.621 0.619	16.575576 16.654089 16.654580 16.733354 16.733354 16.812882 16.813377 16.893173 16.972739 16.972731 17.053071 17.053071 17.134176 17.214551 17.215054 17.296207 17.396707 17.396707	0.379 0.376 0.373 0.370 0.367 0.364 0.361 0.357	20.849240 20.980455 20.981686 21.114373 21.115222 21.249016 21.249871 21.385658 21.521736 21.559862 21.659862 21.659862 21.69039 21.799197 21.800082 21.939771 21.940664 22.081610 22.0882512
0.632 0.630 0.628 0.624 0.624 0.619 0.617 0.613	16.575576 16.654089 16.654580 16.733354 16.812882 16.813377 16.892677 16.893173 16.972739 16.973237 17.053071 17.133674 17.134176 17.215054 17.215054 17.237031 17.296207 17.377131 17.377131	0.379 0.376 0.373 0.370 0.367 0.364 0.361 0.357 0.354	20,8492404 20,9808455 20,981686 21,114373 21,115222 21,249016 21,384796 21,385658 21,52166073 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21
0.632 0.630 0.628 0.626 0.624 0.621 0.619 0.617	16.575576 16.654089 16.654580 16.733354 16.733354 16.812882 16.813377 16.893173 16.972739 16.972731 17.053071 17.053071 17.134176 17.214551 17.215054 17.296207 17.396707 17.396707	0.379 0.376 0.373 0.370 0.367 0.364 0.361 0.357	20,8492404 20,9808455 20,981686 21,1143737 21,115222 21,249161 21,384796 21,385658 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 2
0.632 0.630 0.628 0.624 0.624 0.619 0.617 0.613	16.575576 16.654089 16.654580 16.733354 16.812882 16.813377 16.892677 16.892677 16.972339 17.0533671 17.133674 17.134176 17.215054 17.215054 17.2159504 17.377131 17.377131 17.377738 17.4584838 17.4584838 17.459347	0.379 0.376 0.373 0.370 0.367 0.364 0.361 0.357 0.354	20,849240 20,9808458 20,981686 21,114373 21,115222 21,249016 21,384796 21,384796 21,52606 21,559862 21,521736 21,52606 21,559862 21,52997 21,80008 21,59917 21,99917 21,99917 21,99917 21,99917 21,99917 21,99917 21,99917 22,208,151 22,224741 22,224741 22,22361919 22,2359192 22,2379110
0.632 0.630 0.628 0.626 0.624 0.621 0.619 0.615 0.613	16.575576 16.654089 16.654580 16.733354 16.812882 16.813377 16.892677 16.892677 17.053071 17.053071 17.133674 17.134176 17.215054 17.215054 17.27573 17.27573 17.377131 17.377131 17.377731 17.37731 17.37731 17.375838 17.458388 17.459347 17.540827 17.540827 17.541337	0.379 0.376 0.373 0.370 0.367 0.364 0.361 0.357 0.354 0.351	20,8492404 20,9808455 20,981686 21,114373 21,115222 21,2490161 21,384796 21,385658 21,522606 21,659862 21,59162 21,939771 21,940664 21,940664 21,940664 22,24741 22,24741 22,2361192 22,23701101 22,23514999 22,23514999 22,2515916
0.632 0.630 0.628 0.626 0.624 0.621 0.619 0.615 0.613 0.611 0.609	16.575576 16.654089 16.654580 16.733354 16.812882 16.813377 16.892677 16.893173 16.972739 17.053071 17.053071 17.134176 17.214551 17.215054 17.295703 17.397131 17.377131 17.377131 17.377436 17.3459347 17.540827 17.541337 17.540827 17.541337 17.623097	0.379 0.376 0.373 0.370 0.367 0.364 0.361 0.357 0.354 0.354 0.345	20,8492404 20,9808458 20,981686 21,114373 21,115222 21,249016 21,249871 21,384796 21,384796 21,52260 21,52260 21,52260 21,52260 21,52260 21,52260 21,52260 21,52260 21,52260 21,52260 21,52260 21,52260 21,52260 21,52260 21,52260 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 21,5226 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,51299 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5129 22,5
0.632 0.630 0.628 0.624 0.624 0.621 0.619 0.615 0.613 0.613 0.609	16.575576 16.654089 16.654580 16.733354 16.812882 16.813377 16.892677 16.892677 16.972339 16.972337 17.053071 17.134176 17.215054 17.215054 17.215054 17.275371 17.377131 17.377131 17.377131 17.377131 17.377438 17.458438 17.458438 17.459347 17.541337 17.541337 17.623610 17.705653 17.705653 17.705653	0.379 0.376 0.373 0.370 0.367 0.364 0.361 0.357 0.354 0.351 0.348 0.345 0.342	20,8492404 20,9808458 20,981686 21,114373 21,115222 21,249016 21,384796 21,385688 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 21,52736 22,0821610 22,0821610 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161 22,082161
0.632 0.630 0.628 0.626 0.624 0.621 0.619 0.615 0.613 0.611 0.609	16.575576 16.654089 16.654580 16.733844 16.733847 16.81282 16.813377 16.892677 16.893173 16.972739 17.053071 17.053071 17.134176 17.214551 17.215054 17.295703 17.377131 17.377131 17.377131 17.37476381 17.459347 17.540827 17.541337 17.623097 17.623010 17.705653 17.706167 17.788495	0.379 0.376 0.373 0.370 0.367 0.364 0.361 0.357 0.354 0.354 0.345	20,8492404 20,9808458 20,981686 21,114373 21,115222 21,249016 21,249871 21,384799 21,384799 21,52260 21,52260 21,52960 21,52960 21,52960 21,52960 21,52960 21,52960 21,52960 21,52960 21,52960 21,52960 21,52960 21,52960 21,52960 21,52960 21,52960 22,24741 22,224741 22,22561 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,2361 22,23
0.632 0.630 0.628 0.624 0.624 0.621 0.619 0.615 0.613 0.613 0.609	16.575576 16.654089 16.654580 16.733354 16.812882 16.813377 16.892677 16.893173 16.972239 17.053071 17.053071 17.134176 17.214551 17.215054 17.215054 17.377131 17.377131 17.377131 17.377131 17.377131 17.377438 17.458838 17.458388 17.458381 17.459347 17.541337 17.540827 17.541337 17.623610 17.705653 17.705653 17.705653 17.705653 17.705655 17.789011 17.789011 17.8789015	0.379 0.376 0.373 0.370 0.367 0.364 0.361 0.357 0.354 0.351 0.348 0.345 0.342	20,8492404 20,9808458 20,981686 21,114373 21,115222 21,249016 21,384796 21,384796 21,521736 21,52260 21,559862 21,521736 21,52260 21,59987 21,99197 21,990797 21,990797 21,990797 22,205215 22,224741 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,22547 22,
0.632 0.630 0.628 0.626 0.624 0.621 0.619 0.615 0.613 0.613 0.609	16.575576 16.654089 16.654580 16.733354 16.812882 16.813377 16.892677 16.892677 17.053071 17.053071 17.133674 17.215054 17.215054 17.215054 17.24551 17.215054 17.25070 17.296207 17.377131 17.377638 17.458838 17.459347 17.540827 17.540827 17.540827 17.540351 17.706167 17.788495	0.379 0.376 0.373 0.370 0.367 0.364 0.361 0.357 0.354 0.351 0.348 0.342 0.339	20,8492404 20,9808455 20,9808455 21,114373 21,1152222 21,2490161 21,1387496 21,385658 21,521606 21,559862 21,559862 21,56973 21,799197 21,86073 21,939771 21,940664 22,28174 22,28161 22,28166073 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697 22,281697
0.632 0.630 0.628 0.626 0.624 0.621 0.619 0.615 0.613 0.611 0.609 0.607 0.605	16.575576 16.654089 16.654580 16.733354 16.812882 16.813377 16.892677 16.893173 16.972739 17.053071 17.053571 17.134176 17.214551 17.215054 17.295703 17.377131 17.377131 17.37733 17.45838 17.459347 17.540827 17.541337 17.623097 17.7789011 17.878495 17.788495 17.789011 17.8795048	0.379 0.376 0.373 0.370 0.367 0.364 0.351 0.354 0.351 0.348 0.345 0.342 0.339 0.332	20,8492404 20,9808458 20,981686 21,1143732 21,115222 21,249016 21,384796 21,384796 21,52660 21,52660 21,52660 21,52606 21,52606 21,52606 21,52606 21,52606 21,52606 21,52606 21,52606 21,52606 21,52606 22,082512 22,082512 22,082512 22,24744 22,2562 22,2514990 22,2514990 22,2514990 22,2514990 22,2514990 22,251490 22,261742 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28160 22,28
0.632 0.630 0.628 0.626 0.624 0.621 0.619 0.615 0.613 0.611 0.609 0.607 0.605 0.603	16.575576 16.654089 16.654580 16.7333547 16.812882 16.813377 16.892677 16.893173 16.972239 17.0533671 17.133674 17.134176 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.377131 17.377131 17.377131 17.377131 17.377131 17.375553 17.705653 17.705653 17.705653 17.705653 17.705653 17.705653 17.705653 17.705653 17.705653 17.705653 17.705653	0.379 0.376 0.373 0.370 0.367 0.364 0.361 0.357 0.354 0.351 0.342 0.342 0.339 0.332 0.329	20,8492404 20,9808455 20,9808455 21,114373 21,115222 21,249016 21,3847962 21,3847962 21,385658 21,521736 21,522606 21,659862 21,52960 21,660739 21,799197 21,800082 21,939771 21,940664 22,082512 22,24741 22,2861610 22,2862165 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,251499 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,25149 22,251
0.632 0.630 0.628 0.626 0.624 0.621 0.619 0.615 0.613 0.611 0.609 0.607 0.605	16.575576 16.654089 16.654580 16.733354 16.812882 16.813377 16.892677 16.893173 17.053071 17.053071 17.133674 17.214551 17.215054 17.24551 17.215054 17.24551 17.215054 17.2458318 17.459347 17.5498207 17.623610 17.705653 17.706167 17.781911 17.871628 17.789011 17.871628 17.789011 17.871626 17.789011 17.871626 17.789011 17.871626 17.789011 17.871626 17.789011 17.871626 17.789011 17.871626 17.789011 17.871626 17.789011 17.871626 18.038762 18.038762 18.038762 18.038762 18.038762	0.379 0.376 0.373 0.370 0.367 0.364 0.351 0.354 0.351 0.348 0.345 0.342 0.339 0.332	20,8492404 20,9808455 20,981686 21,114373 21,115222 21,249161 21,138729 21,38749 21,38749 21,38749 21,38749 21,38749 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736 21,512736
0.632 0.630 0.628 0.626 0.624 0.621 0.619 0.615 0.613 0.611 0.609 0.607 0.605 0.603	16.575576 16.654089 16.654580 16.7333547 16.812882 16.813377 16.892677 16.893173 16.972739 17.053071 17.053571 17.134176 17.215054 17.215054 17.24573 17.25573 17.25573 17.25573 17.2623610 17.77638 17.45838 17.45838 17.45838 17.45838 17.45838 17.45838 17.45838 17.45838 17.45838 17.45838 17.45838 17.45838 17.45838 17.755653 17.705653 17.705655 17.789011 17.8789011 17.87144 17.955544 17.955548 17.955548 17.955548 17.955548 17.955548 17.955567 18.038762 18.038762	0.379 0.376 0.373 0.370 0.367 0.364 0.361 0.357 0.354 0.351 0.342 0.342 0.339 0.332 0.329	20,849240 20,9808458 21,114373 21,115222 21,249016 21,384796 21,384796 21,384796 21,521736 21,52260 21,559862 21,521736 21,52260 21,59917 21,80008 21,59917 21,99077 21,99077 21,99077 21,99077 21,99077 21,9907 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 22,2514999 23,311,2366 23,311,236 23,311,236 23,311,236 23,311,236 23,311,311,311,311,311,311,311,311,311,3
0.632 0.630 0.628 0.624 0.624 0.621 0.619 0.615 0.613 0.611 0.609 0.607 0.605 0.603 0.601 0.599	16.575576 16.654089 16.654580 16.733354 16.812882 16.813377 16.892677 16.892677 16.972739 16.972739 16.973237 17.053071 17.133674 17.134176 17.134176 17.215054 17.296207 17.377131 17.377131 17.377731 17.37731 17.37638 17.458388 17.45937 17.540827 17.541337 17.623610 17.706167 17.788495 17.78911 17.871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 17.7871626 18.03283 18.122771 18.123294	0.379 0.376 0.373 0.370 0.367 0.364 0.361 0.357 0.354 0.351 0.348 0.345 0.342 0.339 0.332 0.329 0.326	20,8492404 20,9808455 20,9808455 20,9816862 21,1115222 21,249016 21,115222 21,249016 21,384796 21,385688 21,559862 21,559862 21,56073 21,799197 21,80008 21,939771 21,940664 22,082512 22,24741 22,285621 22,23701101 22,23701101 22,2362160 22,2362160 22,23621 22,23701101 22,23621 22,23621 22,23621 22,23621 22,23621 22,23621 22,23621 22,23621 22,23621 22,23621 22,23621 23,23621 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,23623 23,2
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0.632 0.630 0.628 0.626 0.624 0.621 0.619 0.617 0.613 0.613 0.609 0.607 0.605 0.603 0.601 0.599 0.596 0.594 0.592 0.588	16.575576 16.654089 16.654580 16.733354 16.812882 16.813377 16.892677 16.892677 16.892739 16.972739 16.972739 16.972739 17.053571 17.134176 17.134176 17.215054 17.215054 17.215054 17.215054 17.215054 17.215054 17.25070 17.377131 17.377131 17.377131 17.377131 17.377638 17.45838 17.459347 17.540827 17.540827 17.540827 17.540827 17.541337 17.623610 17.705656 17.879114 17.955567 18.038762 18.039283 18.122771 18.207601 18.291681 18.292081 18.292081 18.292081 18.292081 18.292081 18.376681 18.376681 18.473088 18.377115 18.461795 18.4633512 18.633612 18.633612 18.633612 18.633612	0.379 0.376 0.373 0.373 0.367 0.367 0.364 0.361 0.357 0.354 0.351 0.348 0.342 0.339 0.320 0.320 0.316 0.310 0.307	20,8492404 20,9808455 20,9808455 21,1115222 21,249016 21,115222 21,249016 21,387496 21,387496 21,387496 21,5216073 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 21,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,5217373 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736 22,521736
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0.574	18.892995 18.979528	0.290	25.060930 25.234293
0.571	18.980070 19.066919	0.287	25.235405 25.410881
	19.067463		25.412006
0.569	19.154631 19.155177	0.283	25.589659 25.590798
0.567	19.242663	0.280	25.770691
0.565	19.243211 19.331017	0.276	25.771844 25.954044
	19.331568 19.419701		25.955212
0.563	19.420253	0.273	26.139793 26.140977
0.561	19.508712 19.509266	0.270	26.328014 26.329214
0.559	19.598053	0.266	26.518787
0.557	19.598609 19.687725	0.262	26.520003 26.712209
	19.688284		26.713443
0.555	19.777730 19.778290	0.259	26.908380 26.909631
0.553	19.868071 19.868634	0.256	27.107399 27.108669
0.551	19.958752	0.252	27.309375
0.549	19.959317 20.049767	0.248	27.310664 27.514415
	20.050334		27.515724
0.547	20.141123 20.141692	0.245	27.722643 27.723972
0.545	20.232829 20.233400	0.241	27.934187 27.935538
0.543	20.324879	0.238	28.149184
0.541	20.325453 20.417280	0.234	28.150557 28.367784
	20.417855		28.369181
0.538	20.510036 20.510613	0.230	28.590139 28.591561
0.536	20.603143	0.227	28.816414
0.534	20.603722 20.696610	0.223	28.817861 29.046796
0.532	20.697192 20.790435	0.219	29.048269 29.281504
	20.791019	0.219	29.283007
0.530	20.884624 20.885210	0.215	29.520773 29.522306
0.528	20.979177	0.211	29.764851
0.526	20.979766 21.074098	0.208	29.766414 30.013993
0.524	21.074689 21.169389	0.204	30.015592 30.268496
	21.169983		30.270128
0.522	21.265055 21.265651	0.200	30.528684 30.530354
0.520	21.361096	0.196	30.794945
0.518	21.361694 21.457517	0.192	30.796654 31.067687
0.516	21.458118 21.554320	0.188	31.069439 31.347402
	21.554923		31.349200
0.514	21.554923 21.651509	0.184	31.634629
	21.554923 21.651509 21.652114 21.749086		31.634629 31.636477 31.929991
0.514	21.554923 21.651509 21.652114	0.184	31.634629 31.636477
0.514 0.512 0.510	21.554923 21.651509 21.652114 21.749086 21.749694 21.847055 21.847665	0.184 0.179 0.175	31.634629 31.636477 31.929991 31.931895 32.234188 32.236151
0.514 0.512 0.510 0.508	21.554923 21.651509 21.652114 21.749086 21.749694 21.847055 21.847665 21.945418 21.946031	0.184 0.179 0.175 0.170	31.634629 31.636477 31.929991 31.931895 32.234188 32.236151 32.548077 32.550106
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0.404 0.402 0.402 0.400 0.398 0.393 0.393 0.391 0.385 0.385 0.385 0.387 0.376 0.376 0.376 0.376 0.376 0.375 0.365 0.365 0.365 0.365 0.365 0.365 0.365 0.365 0.355 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554 0.3554	0.408	27.210486		
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0.385 0.383 0.380 0.378 0.376 0.374 0.372 0.370 0.365 0.365 0.363 0.361 0.359 0.357 0.354 0.354 0.352	0.389	28.341371 28.342171		
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0.380 0.378 0.378 0.376 0.374 0.372 0.370 0.365 0.365 0.363 0.361 0.359 0.357 0.354 0.354 0.352		28.601034 28.730733		
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0.374 0.374 0.372 0.370 0.367 0.365 0.363 0.361 0.359 0.357 0.354 0.354 0.352	0.380	28.861971 28.862788		
0.374 0.372 0.370 0.367 0.365 0.363 0.361 0.359 0.357 0.354 0.352 0.350 0.348	0.378	28.993951 28.994772		
0.372 0.370 0.367 0.365 0.363 0.361 0.359 0.357 0.354 0.352 0.354	0.376	29.126681		
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0.370 0.367 0.365 0.365 0.361 0.359 0.357 0.354 0.352 0.354 0.358		29.261004 29.394436		
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0.365 0.363 0.361 0.359 0.357 0.354 0.352 0.352		29.529480 29.530321		
0.363 0.361 0.359 0.357 0.354 0.352 0.350 0.348	0.367	29.665316 29.666162		
0.361 0.359 0.357 0.354 0.354 0.352 0.350	0.365	29.801956 29.802806		
0.359 0.357 0.354 0.352 0.350 0.348	0.363	29.939412		
0.359 0.357 0.354 0.352 0.350 0.348	0.361	29.940268 30.077695		
0.357 0.354 0.352 0.350 0.348		30.078556		
0.354 0.352 0.350 0.348	0.359	30.216818 30.217684		
0.352 0.350 0.348	0.357	30.356789 30.357661		
0.350	0.354	30.497623		
0.350	0.352	30.498499 30.639329		
0.348	0.350	30.640212 30.781923		
		30.782811		
0010	0.348	30.925415 30.926309		
0.346	0.346	31.069821 31.070720		
0.344	0.344	31.215152		
0.341	0.341	31.216057 31.361425		
0.339		31.362336 31.508654		
		31.509571		
0.337	0.337	31.656855 31.657778		
0.335	0.335	31.806042 31.806971		
0.333	U 333	31.806971		

0.330	31.957166 32.107436
0.328	32.108378 32.259674
	32.260623
0.326	32.412962 32.413918
0.324	32.567316 32.568278
0.321	32.722752 32.723721
0.319	32.723721
0.317	32.880265 33.036944
0.314	33.037928 33.195741
	33.196731
0.312	33.355696 33.356693
0.310	33.516828 33.517833
0.307	33.679160 33.680172
0.305	33.680172 33.842712
0.303	33.843732 34.007511
0.301	34.008539 34.173579
	34.174616
0.298	34.340940 34.341984
0.296	34.509611 34.510663
0.294	34.679620
0.291	34.680681 34.850992
0.289	34.852061 35.023750
	35.024828
0.287	35.197918 35.199005
0.284	35.373525 35.374620
0.282	35.550593
0.280	35.729154
0.277	35.730269 35.909244
0.275	35.910368 36.090894
0.273	36.092027
0.272	36.274131 36.275275
0.270	36.458990 36.460143
0.268	36.645504
0.265	36.646668 36.833710
0.263	36.834885 37.023640
0.260	37.024826 37.215335
0.258	37.216532 37.408836
0.230	37.410044
0.255	37.604189 37.605408
0.253	37.801437 37.802670
0.250	38.000629 38.001874
0.248	38.201812
0.246	38.203069 38.405030
0.243	38.406299 38.610332
0.241	38.611615 38.817775
	38.819071
0.238	39.027414 39.028725
0.236	39.239314 39.240638
0.233	39.453535
0.231	39.670128
0.228	39.671482 39.889163
0.226	39.890532 40.110718
	40.112103
0.223	40.334874 40.336276
0.220	40.561723 40.563142
0.218	40.791346
0.215	40.792783 41.023831
0.212	41.025285 41.259267
0.210	41.260741 41.497756
	41.499249
0.207	41.740914
0.204	41.984308 41.985841
0.202	42.232597 42.234151
0.199	42.484391
0.196	42.485967 42.739824
0.193	42.741423 42.999027
0.190	43.000651 43.262154
0.190	T3.202154

	0.187	43.263803 43.529375
		43.531051
0).184	43.800857 43.802559
0	.181	44.076782
	170	44.078513
).178	44.357352 44.359113
0).176	44.642784
0	0.172	44.644575 44.933304
	0.169	44.935128 45.229171
		45.231031
0	.166	45.530656 45.532550
0	0.163	45.838055
-	0.160	45.839987 46.151708
		46.153680
0).157	46.471962 46.473977
0	.154	46.799238
0	0.150	46.801298 47.134021
		47.136130
0).147	47.476826 47.478988
0	0.143	47.828205
0	0.140	47.830422 48.188820
	0.136	48.191097 48.559407
		48.561749
0	0.133	48.940793 48.943206
0	.129	49.333945
0	0.125	49.336434 49.740035
		49.742610
0).121	50.160428 50.163100
0	.117	50.596729
0	0.113	50.599506 51.050911
		51.053809
	0.108	51.525482 51.528517
0	.104	52.023607
0	0.099	52.026803 52.549505
		52.552893
	0.094	53.108972 53.112599
0	0.089	53.710661
0	0.084	53.714597 54.368658
	0.077	54.373031 55.109572
		55.114649
0	0.092	56.000666 56.007392
0	0.086	56.604970
0	0.080	56.607581 57.040276
		57.043144
	0.074	57.522943 57.526184
	0.067	58.078666 58.082552
0	.090	58.777414
0	0.085	58.782962 59.350508
		59.351733
0	0.080	59.553047 59.554357
0	.074	59.770454
0	0.067	59.771870 60.006488
	0.061	60.008041 60.266940
		60.268673
0	0.053	60.560968 60.562964
0	0.044	60.905296
0	0.033	60.907716 61.338632

Appendix 2: Sample Raw Data: Electromagnet on 0.30A Supply

Variable Acceleration Velocity Time Distance

Data obtained from Vernier Photogate, extracted via Labquest Interface to Logger Pro.
Only data coming at and after maximum deceleration has been extracted for this appendix.

	D	10 (Trial 1)				D	11 (Trial 2)			1	D	12 (Trial 3)			D	
		<u> </u>		1								<u> </u>		1	Proces	
Time	Gate State	Distance	Velocity	Acc	Time	Gate State	Distance	Velocity	Acc	Time	Gate State	Distance	Velocity	Acc		Average Time
119.867484 119.867730	0	137.05	1.271	-0.80	119.828962 119.829213	0	134.00	1.240	-0.80	119.945255 119.945510	1	132.10	1.224	-0.82	1.245	0.000000 0.000251
119,907314	0	137.10	1.239	-0.80	119.869827	0	134.05	1.207	-0.79	119.986692	0	132.15	1.190	-0.80	1.212	0.040711
119.907566	1				119.870086	1				119.986955	1					0.040969
119.948190	0	137.15	1.207	-0.78	119.911820	0	134.10	1.174	-0.77	120.029315	0		1.156	-0.78	1.179	0.082541
119.948449 119.990173	1 0	137.20	1.175	-0.76	119.912086 119.955005	1	134.15	1.142	-0.75	120.029586 120.073197	1 0		1.123	-0.75	1.147	0.082807 0.125558
119.990173	1	137.20	1.1/5	-0.76	119.955279	1	134.13	1.142	-0./3	120.073197	1		1.123	-0./3	1.147	0.125831
120.033325	0	137.25	1.143	-0.74	119.999455	0	134.20	1.109	-0.73	120.118411	0	132.30	1.089	-0.73	1.114	0.169830
120.033598	1				119.999737	1				120.118698	1					0.170111
120.077716 120.077998	0	137.30	1.110	-0.72	120.045243	0	134.25	1.076	-0.71	120.165043	0		1.056	-0.71	1.081	0.215434
120.077998	0	137.35	1.078	-0.70	120.045534	0	134.30	1.043	-0.69	120.165339 120.213186	0		1.022	-0.69	1.048	0.215723 0.262454
120.123713	1	137.33	1.070	-0.70	120.092755	1	154.50	1.043	-0.07	120.213492	1	132.40	1.022	-0.07	1.040	0.262753
120.170525	0	137.40	1.046	-0.68	120.141184	0	134.35	1.010	-0.67	120.262938	0		0.988	-0.66	1.015	0.310982
120.170824	1	108.15	4 0 4 0	-0.66	120.141494	1 0	40440	0.088	-0.64	120.263254	1		0.955	-0.64	0.982	0.311290
120.219113 120.219422	1	137.45	1.013	-0.66	120.191532 120.191852	1	134.40	0.977	-0.64	120.314411	1	132.50	0.955	-0.64	0.982	0.361118
120.269282	0	137.50	0.981	-0.64	120.243612	0	134.45	0.944	-0.62	120.367731	0	132.55	0.921	-0.62	0.949	0.412975
120.269601	1				120.243944	1				120.368071	1					0.413305
120.321140	0	137.55	0.948	-0.62	120.297553	0	134.50	0.911	-0.60	120.423033	0		0.888	-0.60	0.916	0.466675
120.321470 120.374806	1 0	137.60	0.916	-0.60	120.297896 120.353493	1 0	134.55	0.878	-0.58	120.423386 120.480472	1 0		0.854	-0.57	0.883	0.467017 0.522357
120.374806	1	137.00	0.910	-0.00	120.353493	1	134.33	0.076	-0.50	120.480839	1		0.034	-0.57	0.003	0.522337
120.430415	0	137.65	0.883	-0.58	120.411590	0	134.60	0.844	-0.56	120.540222	0		0.820	-0.55	0.849	0.580175
120.430769	1				120.411960	1	Ţ.,			120.540603	1					0.580544
120.488120 120.488488	0	137.70	0.850	-0.56	120.472017 120.472403	0	134.65	0.811	-0.54	120.602478 120.602876	0	132.75	0.787	-0.53	0.816	0.640305 0.640689
120.548093	0	137.75	0.818	-0.54	120.534973	0	134.70	0.778	-0.52	120.667464	0	132.80	0.753	-0.51	0.783	0.702943
120.548475	1				120.535376	1				120.667880	1					0.703343
120.610523	0	137.80	0.785	-0.52	120.600684	0	134.75	0.745	-0.50	120.735435	0		0.719	-0.49	0.750	0.768314
120.610922	1 0	137.85	0.752	-0.50	120.601105	1 0	134.80	0.711	-0.47	120.735871 120.806687	1		0.685	-0.46	0.716	0.768732 0.836675
120.675629	1	137.85	0./52	-0.50	120.669410	1	134.80	0./11	-0.47	120.806687	1		0.685	-0.46	0./16	0.836675
120.743662	0	137.90	0.719	-0.48	120.741443	0	134.85	0.678	-0.45	120.881560	0		0.651	-0.44	0.683	0.908321
120.744097	1				120.741905	1				120.882042	1					0.908781
120.814905	0	137.95	0.686	-0.45	120.817121	0	134.90	0.644	-0.43	120.960449	0	133.00	0.617	-0.42	0.649	0.983591
120.815362 120.889682	0	138.00	0.652	-0.43	120.817608 120.896832	0	134.95	0.611	-0.41	120.960957 121.043818	0	133.05	0.583	-0.40	0.615	0.984075 1.062877
120.890163	1	130.00	0.032	-0.43	120.897345	1		0.011	-0.11	121.044356	1		0.505	-0.40	0.013	1.063388
120.968366	0	138.05	0.619	-0.41	120.981040	0	135.00	0.578	-0.39	121.132199	0		0.549	-0.37	0.582	1.146635
120.968873	1	10010	0 804	0.00	120.981584	1	40505	0.511	206	121.132771	1		0 = 4 =	0.05	0.510	1.147176
121.051384 121.051920	0	138.10	0.586	-0.39	121.070276 121.070853	0	135.05	0.544	-0.36	121.226219 121.226829	0		0.515	-0.35	0.548	1.235393
121.139231	0	138.15	0.553	-0.36	121.165151	0	135.10	0.511	-0.34	121.326654	0	133.20	0.482	-0.32	0.515	1.329778
121.139799	1				121.165766	1				121.327307	1					1.330390
121.232453	0	138.20	0.520	-0.34	121.266434	0	135.15	0.478	-0.32	121.434408	0		0.448	-0.30	0.482	1.430531
121.233057 121.331737	0	138.25	0.488	-0.32	121.267092 121.374990	1 0	135.20	0.445	-0.29	121.435110 121.550622	1 0		0.414	-0.28	0.449	1.431186 1.538549
121.331737	1	130.23	0.400	-0.32	121.375697	1	133.20	0.443	-0.29	121.551382	1	133.30	0.414	-0.20	0.445	1.539253
121.437848	0	138.30	0.456	-0.29	121.491924	0	135.25	0.412	-0.27	121.676740	0	133.35	0.380	-0.26	0.416	1.654937
121.438538	1				121.492688	1				121.677566	1					1.655697
121.551752 121.552495	0	138.35	0.423	-0.27	121.618618 121.619448	0	135.30	0.379	-0.25	121.814649	0	133.40	0.346	-0.23	0.383	1.781106 1.781933
121.552495	0	138.40	0.391	-0.25	121.619448	0	135,35	0.346	-0.23	121.815556 121.966853	0	133.45	0.312	-0.21	0.350	1.781933
121.675467	1	250.70	0.071	J.23	121.757771	1	100.00	0.010	0.23	121.967860	1		0.012	J.21	0.550	1.919799
121.808128	0	138.45	0.359	-0.23	121.909033	0	135.40	0.313	-0.21	122.136723	0	100.00	0.278	-0.19	0.317	2.070728
121.809002	1 0	120 50	0.227	0.24	121.910037	1	125.45	0.200	0.10	122.137852	1		0244	0.17	0.284	2.071730
121.954153 121.955112	1	138.50	0.327	-0.21	122.078311 122.079435	0	135.45	0.280	-0.19	122.328976 122.330264	1		0.244	-0.17	0.284	2.239913 2.241037
122.115419	0	138.55	0.295	-0.19	122.269186	0	135.50	0.246	-0.16	122.550646	0		0.210	-0.14	0.250	2.431183
122.116485	1				122.270462	1				122.552150	1					2.432465
122.295640	0	138.60	0.262	-0.17	122.488336	0	135.55	0.213	-0.14	122.812586	0	133.65	0.175	-0.12	0.217	2.651620
122.296838	1 0	138.65	0.229	-0.15	122.489820 122.745785	1	135.60	0.179	-0.12	122.814395 123.133233	1 0		0.140	-0.10	0.183	2.653117 2.912518
122.500238	1	130.03	0.229	-0.13	122.747554	1	133.00	0.179	-0.12	123.135233	1		0.140	-0.10	0.103	2.912316
122.737034	0	138.70	0.196	-0.13	123.058044	0	135.65	0.145	-0.10	123.548902	0	133.75	0.105	-0.07	0.149	3.234093
122.738645	1				123.060237	1				123.551964	1					3.236382
123.018105 123.020050	0	138.75	0.163	-0.11	123.456913 123.459821	0	135.70	0.110	-0.08	124.148867 124.153724	0	100.00	0.070	-0.05	0.114	3.660728 3.663965
123.020050	0	138.80	0.129	-0.09	123.459821	0	135.75	0.075	-0.05	125.331834	0				0.102	4.357060
123.367322	1				124.020592	1		0.07.5	0.00	125.346770	1					4.364328
123.820274	0	138.85	0.095	-0.06	125.008111	0	135.80								0.095	5.084563
123.823666	1	120.00	0.071	-0.04	125.018407	1									0.061	5.089126
124.497926 124.503572	1	138.90	0.061	-0.04				-		-					0.061	5.763386 5.765268
126.151461	0	138.95	0.031	0.00											0.031	6.314564
126.198714	1															
127.720171	1	139.00														
	0			l		l										