



Tamil Nadu

Judicial Services Exam

Tamil Nadu Public Service Commission (TNPSC)

Volume - 7

General Knowledge & Reasoning



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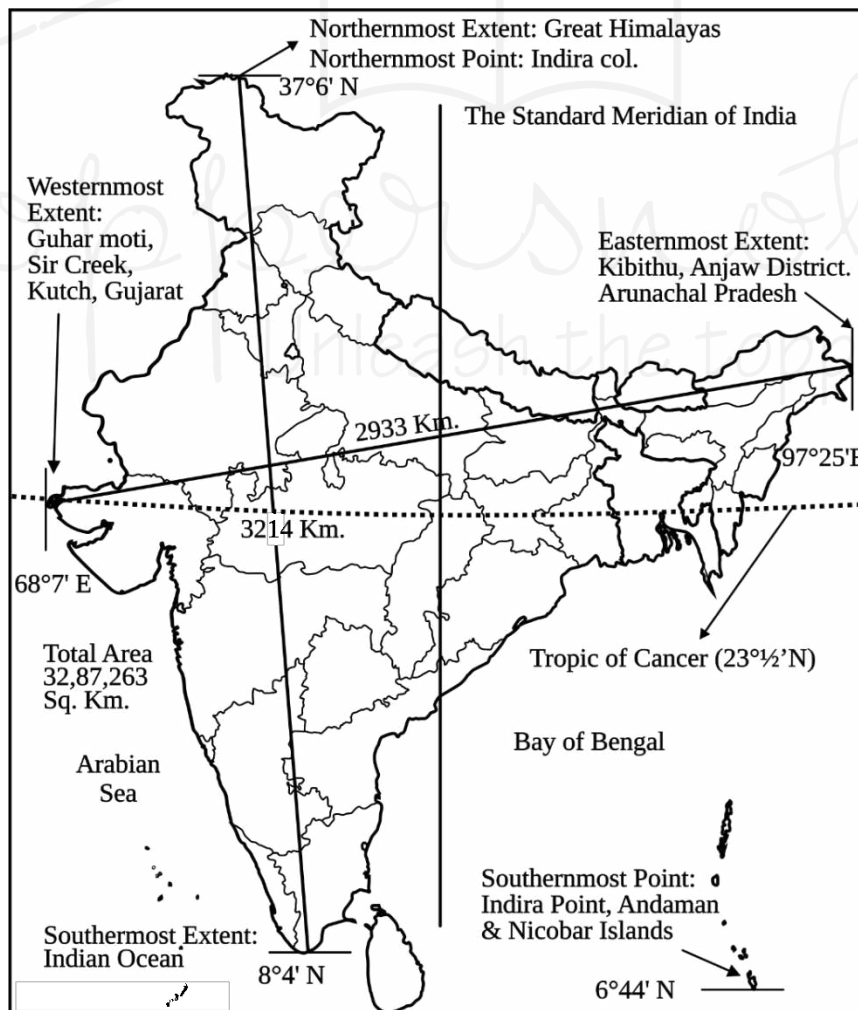
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CHAPTER

Indian Geography

INDIA - AT A GLANCE

Aspect	Details
Latitudinal Extent	8°4' N to 37°6' N
Longitudinal Extent	68°7' E to 97°25' E
Northernmost Point	Indira Col, Ladakh
Southernmost Point	Indira Point, Great Nicobar Island
Easternmost Point	Kibithu/Valang, Arunachal Pradesh
Westernmost Point	Gaurmukh, Gujarat
Area	3,287,263 sq km
World Ranking by Area	7th largest country
Percentage of World Area	2.4%
Countries Larger than India by Area	Russia, Canada, China, USA, Brazil, Australia
Latitudinal Distance (North–South)	3,214 km
Longitudinal Distance (East–West)	2,933 km
Population Ranking	Largest in the world



Coastline of India:

- On 29th April 2025, the Government of India recalculated the country's coastline. Including islands, the total coastline length is **11,098 km**. The coastline touches **9 states** and **66 districts**.
- **Western Coast States:** Gujarat, Maharashtra, Goa, Karnataka, Kerala
- **Eastern Coast States:** Tamil Nadu, Andhra Pradesh, Odisha, West Bengal
- **State-wise Highlights:**
 - ✓ **Longest coastline:** Gujarat (2,340 km)
 - ✓ **Shortest coastline:** Goa (193 km)
 - ✓ On the eastern coast, the **longest coastline** is Tamil Nadu (1,068 km)
- **Maritime Zones (as per International Maritime Organization):**
 - ✓ Territorial Sea
 - ✓ Contiguous Zone
 - ✓ Exclusive Economic Zone (EEZ)
- **Tropic of Cancer in India:**

- ✓ The Tropic of Cancer is located at **23°N latitude**, north of the Equator.
- ✓ It passes through **8 Indian states:** Gujarat, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, West Bengal, Tripura, and Mizoram.
- ✓ The **Mahi River** crosses the Tropic of Cancer **twice**.

Standard Time

- The **Standard Time** in India is based on the **82.5° East longitude**, which is the **central meridian** passing through **Naini (Mirzapur), Uttar Pradesh**.
- India's standard time is **5 hours 30 minutes ahead of Greenwich Mean Time (GMT)**, meaning when it is **12:00 noon in England**, it is **5:30 PM in India**.
- The **standard meridian** passes through **five states:** Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Odisha, and Andhra Pradesh.

Bordering Countries

Country	Capital	Border Length with India	Bordering Indian States / Remarks
Afghanistan	Kabul	106 km	Ladakh (via Wakhan Corridor / PoK region)
Bangladesh	Dhaka	4096.7 km	West Bengal, Assam, Meghalaya, Tripura, Mizoram
Bhutan	Thimphu	699 km	West Bengal, Sikkim, Assam, Arunachal Pradesh
China	Beijing	3488 km	Ladakh, Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh
Myanmar	Naypyidaw	1643 km	Arunachal Pradesh, Nagaland, Manipur, Mizoram
Nepal	Kathmandu	1751 km	Bihar, Uttar Pradesh, Uttarakhand, West Bengal, Sikkim
Pakistan	Islamabad	3323 km	Jammu & Kashmir, Ladakh, Punjab, Rajasthan, Gujarat
Sri Lanka	Colombo (Commercial), Sri Jayawardenepura Kotte (Legislative)	Sea Border	Separated from India by the Gulf of Mannar
Maldives	Malé	Sea Border	Located southwest of India in the Indian Ocean , below Lakshadweep Islands

International Boundaries

Adjacent to India:

- **Radcliffe Line** – Between India and Pakistan
- **24th Parallel** – Between India and Pakistan
- **McMahon Line** – Between India and China

- **LAC (Line of Actual Control)** – Between India and China
- **Durand Line** – Between Afghanistan and Pakistan
- **Johnson Line (1865) & MacDonald Line (1893)** – Between China and India (Ladakh); currently considered illegal by China

International Disputed Areas Involving India:

- **Galwan Valley** – India and China
- **Siachen Dispute** – India and Pakistan
- **Katchatheevu Island** – India and Sri Lanka
- **Kalapani Dispute** – India and Nepal
- **Susta Area Dispute** – India and Nepal

Administrative Status

- **Administrative Structure:** India currently comprises **28 states** and **8 Union Territories**.
- **Districts:** In 2011, India had a total of **640 districts**, which increased to **780 districts** by 2025 (as of October 2025).

- **Villages:** In 2011, India had approximately **640,000 villages**.

Political Structure:

- **Lok Sabha Seats:** Maximum 550; currently 543.
- **Rajya Sabha Seats:** Maximum 250; currently 245.
- **Legislative Councils:** Present in six states: Uttar Pradesh (100), Maharashtra (78), Bihar (75), Karnataka (75), Andhra Pradesh (58) and Telangana (40)

India's Physical Landscape

Major Himalayan Ranges of India

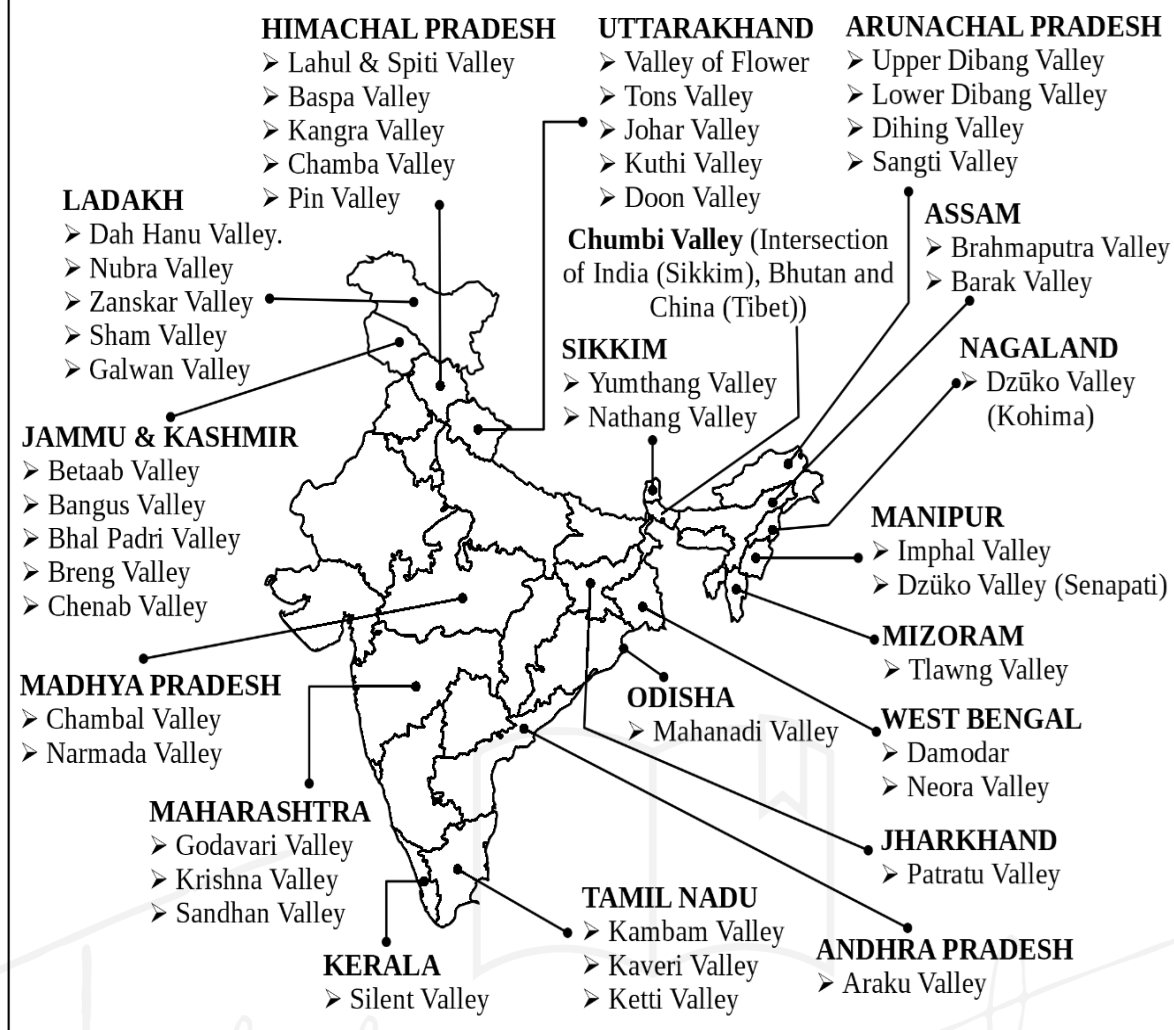
Mountain Range	Location / Extent	Key Notes (Description)	Highest Mountain Peak
Karakoram Range	Ladakh (India), China, Pakistan	One of the world's most rugged mountain systems; contains the greatest concentration of glaciers outside the polar regions (e.g., Siachen Glacier).	K2 (Mount Godwin-Austen) – 8,611 m
Ladakh Range	Ladakh (UT)	Lies between the Indus River and the Karakoram Range; cold desert climate; parallel to the Zaskar Range.	Lunpo Gangri – ~ 7,095m
Zaskar Range	Ladakh & Himachal Pradesh	Eastern extension of the Greater Himalayas; acts as a climatic barrier; Zaskar River cuts through it forming deep gorges.	Kamet Peak – ~7,756 m
Shiwalik (Siwalik) Range	Outer Himalayas (Punjab to Assam foothills)	Youngest, lowest & outermost Himalayan range; composed of unconsolidated sediments; prone to erosion and landslides.	Churdhar Peak – 3,647 m
Pir Panjal Range	Jammu & Kashmir, Himachal Pradesh	Largest range of the Lesser Himalayas; separates Kashmir Valley from Himachal Pradesh; famous for passes like Banihal.	Indrasan – 6,221 m
Dhauladhar Range	Himachal Pradesh	Southern branch of the Lesser Himalayas; rises sharply from Kangra Valley; known for steep slopes and snow peaks.	Hanuman Tibba – 5,860 m

Important valleys of India

- **Western Ghats' highest peak** - Anamudi (2695 m), Kerala
- **Eastern Ghats' highest peak** - Jindagarh (1690 m), Andhra Pradesh
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- **Eastern Ghats' highest peak** - Jindagarh (1690 m), Andhra Pradesh
- **Andaman and Nicobar's highest peak** - Saddle Peak (732 m), North Andaman
- **Bihar's highest peak** - Someshwar (874 m)
- **Chhattisgarh's highest peak** - Gaurkata (Samripat, 1225 m)
- **Jharkhand's highest peak** - Parasnath (Giridih district)

Important Valleys Of India



Prominent Himalayan Glaciers

Glacier Name	Location	Important Features
Siachen	Karakoram ranges	Nubra Valley of Himalayas; 2nd longest glacier outside Polar region largest glacier of trans-Himalayas
Biafo	Karakoram	Flows into the Shigar River
Gangotri	Uttarakhand	Origin below Chaukhamba Peak; also known as 'Gomukh'
Hispar	Gilgit-Baltistan	World's longest glacial system
Zemu	Sikkim/Nepal	Largest glacier of Eastern Himalaya; feeds River Teesta
Sonapani	Lahaul & Spiti, HP	Longest glacier in the Pir Panjal range. A glacier stream is a tributary to the Chandra River, which later merges with the Bhaga River to form the Chenab.
Milam	Uttarakhand	Major source of River Gori Ganga (Saryu); biggest glacier in Kumaon Himalaya
Chong Kumdan	Karakoram, Ladakh	Feeds Shyok River due to potential blocking
Diamir	POK	Known as the 'King of Mountains'
Rupal	Kashmir	In Greater Himalayas; flows north eastward
Bhillans, Thajivas, and Prui	Jammu and Kashmir	

Prominent Himalayan Passes

Pass Name	State / UT	Location / Border	Importance
Zoji La	Jammu & Kashmir, Ladakh	Greater Himalayas	Connects Srinagar–Kargil & Leh; Lying in the middle of India and China
Banihal Pass	Jammu & Kashmir	Pir Panjal Range	Jawahar Tunnel passes beneath it ; Srinagar–Jammu route ; a pass connecting the rest of India to Kashmir .
Khardung La	Ladakh	Ladakh Range	Road to Siachen; one of highest motorable roads
Chang La	Ladakh	Ladakh Range	Connects Leh to Pangong Lake
Fotu La	Ladakh	Zaskar Range	Highest point on Srinagar–Leh highway
Namika La	Ladakh	Zaskar Range	On Kargil–Leh route
Baralacha La	Himachal Pradesh	Zaskar Range	On Leh–Manali highway
Shipki La	Himachal Pradesh	India–Tibet Border (Kinnaur)	Historic silk route for trade.
Mana Pass	Uttarakhand	Chamoli District	Road to Kailash–Mansarovar; Indo-China route
Niti Pass	Uttarakhand	Chamoli District	Old trade route to Tibet
Lipulekh Pass	Uttarakhand	Pithoragarh District	Kailash–Mansarovar Yatra route; India–Nepal–Tibet tri-junction
Muling La	Uttarakhand		connects Uttarakhand and Tibet and is situated in the north of Gangotri.
Nathu La	Sikkim	Indo–China Border	A border trade post with China; one of the highest motorable roads in the world connects Sikkim with the Tibet Autonomous Region of China.
Jelep La	Sikkim	Near Kalimpong	Trade route to Lhasa in historical times
Sella Pass	Arunachal Pradesh	Tawang District	Connects Tawang to rest of state; Sella tunnel world’s Longest twin lane tunnel above 13000 feet altitude.
Bum La	Arunachal Pradesh	Near Tawang	Indo–China sensitive military pass
Dipher Pass	Arunachal Pradesh	East Kameng	Eastern Himalayas, remote and strategic
Khunjerab Pass	(POK)	Gilgit–Baltistan (Pak-Occupied Kashmir)	On China–Pakistan border; on CPEC route
Lanak La	Ladakh (Disputed Border)	Aksai Chin region (Indo-China)	Disputed India–China border crossing

Lekhapani	Arunachal Pradesh	Eastern tip near Assam-Arunachal	Historic WW-II route via Stilwell Road; strategic for eastern sector
Rohtang Pass	Himachal Pradesh	Pir Panjal Range	Connects Kullu Valley to Lahaul and Spiti valleys ; separates Chenab and Beas basins a famous tourist attraction site
Debsa Pass	Himachal Pradesh	-	Located between Kullu and Spiti districts
Dihang Pass	Arunachal Pradesh	-	Connects Arunachal Pradesh to Myanmar Beyond this pass, the Himalayas bend sharply to the south and spread along the eastern boundary of India.
Khyber Pass	Pakistan–Afghanistan		Connects Peshawar (Pakistan) to Jalalabad (Afghanistan) ; part of the ancient Silk Road trade network
Muling La Pass & Mangsha Dhura Pass	Uttarakhand	Greater Himalayas	Connects Uttarakhand to Tibet

Geographical Division of Plains

Geographical Type	Location/Extent	Characteristics / Special Features
Bhabar Plains	From Punjab to Assam; located south of the Shivalik hills (foothill region)	Small rivers disappear underground in these plains.
Terai Plains	South of the Bhabar plains; marshy area	Rivers flow on the surface instead of going underground.
Bangar Plains	Doab regions situated between two rivers	Composed of gravel, stones, sand, and clay; formed by older alluvium. Also called Bhud, Reh, Dhaya, or Bet in some regions.
Khadar Plains	Formed by new alluvial soil	Highly fertile; located in flood-prone areas; formed by recent alluvium.

Doab Area

Doab Name	Rivers It Lies Between
Sind Sagar Doab	Indus & Jhelum
Jech Doab	Jhelum & Chenab
Rachna Doab	Ravi & Chenab
Bari Doab	Beas & Ravi
Bist Doab	Beas & Sutlej

Plateau

Plateau	Location	Special Features / Notes	Major Rivers / Highlights
Central India Plateau	Rajasthan, Madhya Pradesh, Uttar Pradesh	Known as the "Basket of Mustard" of Central India	Parvati, Chambal, Banas, Kuno, Seep

Malwa Plateau	Madhya Pradesh	Located between Aravalli and Vindhya ranges; famous for soybean production; rich in black soil; Chinese traveler Faxian called its climate one of the best in the world	–
Bundelkhand Plateau	Madhya Pradesh, Uttar Pradesh	Panna district produces the most diamonds in India; famous tourist sites include Khajuraho, Orchha, Chanderi, and Devgarh	–
Baghelkhand Plateau	Madhya Pradesh, Chhattisgarh	Red-yellow soil predominates; major rice-producing region; highest concentration of sal trees in India	–
Chota Nagpur Plateau	Bihar, Jharkhand, West Bengal	Rich in minerals; known as the "Ruhr of India"; largest mineral production in India	–
Kathiawar Plateau	Gujarat	Region has black soil; famous for peanut and cotton cultivation	–
Deccan Plateau	Maharashtra, Gujarat, Karnataka	Largest plateau in India; Kalsubai is its highest peak; formed by volcanic activity and basalt rocks	–
Dandakaranya Plateau	Odisha, Chhattisgarh, Andhra Pradesh	Famous for rice cultivation; one of the most Naxal-affected regions	Mahanadi, Tel, Ong
Rayalaseema Plateau	Andhra Pradesh, Telangana	Red-yellow soil predominates; famous for tobacco and maize cultivation	–

Important Facts

- Natarhat in Jharkhand is known as the "Queen of Chotanagpur Plateau."
- The highest peak of the Chotanagpur Plateau is Parasnath Hill.
- The Rashtrapati Bhavan in New Delhi, India, is located on Raisina Hill.

Indian Coast

West Coast (Western Coastal Plains)

Coastal Plain	Location / Extent	Special Features / Notes
Kathiawar Coast	Gujarat to Daman	Major ports: Pandit Deendayal (Kandla), Dahej, Mundra.
Konkan Coast	Daman to Goa	Major ports: Mumbai, Nhava Sheva (Jawaharlal Nehru).
Canara Coast	Goa to New Mangalore	Also called the Kannada Coast. Major ports: New Mangalore, Marmagao (Vasco da Gama).
Malabar Coast	New Mangalore to Kanyakumari	Major port: Kochi (Spice Port). Minerals: sand, thorium, monazite.

East Coast (Eastern Coastal Plains)

Coastal Plain	Location / Extent	Special Features / Notes
Northern Circars Coast	West Bengal to Mahanadi Delta	Major ports: Haldia, Kolkata.
Utkal Coast	Mahanadi to Krishna Delta	Major port: Paradip (Odisha).
Golconda Coast	Krishna River to Cauvery River	Major port: Vishakhapatnam (India's deepest port).
Coromandel Coast	Cauvery River to Kanyakumari	Highest rainfall due to retreating monsoon (Nov–Dec). Rice cultivation in Nov–Dec.

Major Island Groups of India

➤ **Andaman & Nicobar Islands (Bay of Bengal):**

- ✓ Volcanic islands known for pristine beaches, coral reefs, and rich biodiversity (Havelock, Neil, Ross).
- ✓ The Great Nicobar Island is the largest island in India
- ✓ 22 islands in Nicobar.
- ✓ It is believed that Andaman and Nicobar Islands are an elevated portion of submarine mountains.

➤ **Lakshadweep Islands (Arabian Sea):**

- ✓ Coral atolls famous for lagoons, marine life, and water sports.

Arabian Sea Islands

Island / Island Group	Location	Features / Special Notes
Aliya Wet	Gulf of Khambhat	Formed between the mouths of the Narmada and Tapi rivers; famous for petroleum production.
Khadiya Wet	Gulf of Khambhat	Island formed by the Narmada and Tapi rivers.
Piram Wet	Gulf of Khambhat	Located in Bhavnagar district; famous for salt production.
Bombay High	Maharashtra (near Mumbai)	India's largest petroleum source, located near Mumbai.
Basin Island	Maharashtra	A small petroleum source.
Elephanta Island	Maharashtra	Famous for the Elephanta Caves located on this island.
Jawahar Island	Maharashtra	Also known as Butcher Island.
Salsette Island	Maharashtra	Home to the major city of Thane.
Chorão Island	Goa	Location of the Salim Ali Bird Sanctuary.
Willingdon Island	Kerala	Located in Vembanad Lake, Kerala.
Lakshadweep Islands	Arabian Sea	Coral-built atoll islands consisting of 36 small islands.

Bay of Bengal Islands

Island Name	Location	Notes / Significance
New Moore Island	Bay of Bengal	Disputed between India and Bangladesh since 1981.
Kalash Island	Bay of Bengal	Famous island within Sundarbans National Park.
Ganga Sagar Island	West Bengal	Located at the mouth of the Hooghly River; also known as Sagar Island.
Abdul Kalam Island	Odisha	India's missile launching center; formerly called Wheeler Island. Nearby are two smaller islands: Chandipur and Balasore.
Sriharikota Island	Andhra Pradesh	Houses the Satish Dhawan Space Centre.
Pamban Island	Tamil Nadu	Located in the Gulf of Mannar.
Barren Island	Eastern Andaman	India's only active volcano. Last eruption occurred on 5 November 2020.
Andaman & Nicobar Islands	Bay of Bengal	India's largest island group.
Shaheed Dweep	Andaman & Nicobar	Formerly called Neil Island.
Subhash Chandra Bose Island	Andaman & Nicobar	Formerly called Ross Island.
Swaraj Dweep	Andaman & Nicobar	Formerly called Havelock Island.

River Islands

Island Name	River	Notable Facts / Description	Location / State
Majuli Island	Brahmaputra	World's largest river island; declared India's first river island district in 2017	Assam
Umanand Island	Brahmaputra	Famous for the Golden Langur	Assam
Srirangapatnam Island	Kaveri	Located on an island in Tamil Nadu	Tamil Nadu
Mandhata Island	Narmada	Historical/Geographical significance	Khargone/Khandeva, Madhya Pradesh

Rivers and Water Resources of India

Important River of India

Rivers	Description
Indus	➤ Origin: Near Mount Kailash in Tibet (China) ➤ Major Tributaries: Jhelum River, Chenab River, Ravi River, Beas River, Sutlej (Satluj) River, etc. ➤ Course: Enters India through Ladakh (UT of Ladakh) and flows northwest into Pakistan and finally drains into the Arabian Sea. ➤ According to the 1960 Indus Waters Treaty, the eastern rivers of the water system - Sutlej, Ravi and Chenab were to be with India ➤ North to South Sequence: Indus, Chenab, Ravi, Beas, Satluj
Ganga	➤ Origin: Gangotri Glacier near Gaumukh in Uttarakhand. ➤ Total length: 2,525 km (longest river in India). ➤ Empties into the Bay of Bengal through the Sunderbans Delta ➤ Major Tributaries: Yamuna, Son, Kosi, Ghaghara etc. ➤ Distributary: Bhagirathi-Hooghly (formed at Farakka) ➤ At Devprayag the Bhagirathi is Joined by Alaknanda.
Yamuna (1375 km)	➤ Source: Yamunotri Glacier in Uttarakhand. ➤ Role: Westernmost & longest tributary of the Ganga, joining it at Prayag (Allahabad). ➤ Right-bank tributaries: Chambal, Sind, Betwa (480 km), Ken. ➤ Left-bank tributaries: Hindan, Rind, Senger, Varuna, Tons (Longest tributary, its tributaries- Pabbar, Asan)
Son(780km)	➤ Origin: Amarkantak Plateau in Madhya Pradesh. ➤ Note: Large south bank tributary of the Ganga.
Chambal (1050km)	➤ Source: Near Mhow, Madhya Pradesh. ➤ Confluence: Joins Yamuna. ➤ Feature: Famous for ravines and badland topography. ➤ Tributaries: Banas, Kali Sindh, Parvati ➤ Border of Madhya Pradesh and Uttar Pradesh and Madhya Pradesh and Rajasthan
Kosi(730km)	➤ Type: Antecedent river. ➤ Source: Arun River from Everest region, merging to form Saptakoshi in Nepal. ➤ Nickname: "Sorrow of Bihar" due to flooding. ➤ Plain Elevation: 30 metres above sea level.
Narmada (1312km)	➤ Origin: Amarkantak Plateau ➤ Flow: Flows through fault valleys between the Satpura and Vindhya ranges; forms the boundary between North and South India ➤ Feature: Dhuandhar Waterfall; formation of an estuary ➤ Tributaries: Tawa, Sher, Shalkar

Tapti	➤ Origin: Multai, fault valley of the Satpura Range (Betul, Madhya Pradesh) ➤ Flow: Passes through Madhya Pradesh, Maharashtra, and Gujarat ➤ Feature: Flows parallel to the Narmada; about 80% of its basin lies in Maharashtra ➤ Tributaries: Waghur, Aner, Girna, Purna, Panzara and Bori.
Brahmaputra	➤ Origin: Chemayungdung Glacier, near Mount Kailash (Northern Himalayas) ➤ Total length: ~2,900 km (one of the longest rivers of Asia). ➤ Finally drains into the Bay of Bengal, forming the Ganga–Brahmaputra–Meghna Delta. ➤ Major Tributaries: Subansiri, Manas, Sankosh, Dihang, Lohit, Burhi dihing etc. ➤ It has the least storage capacity of usable water.
Mahanadi (858km)	➤ Origin → Sihawa range, Chhattisgarh ➤ States → Chhattisgarh, Odisha (The largest river here) ➤ Tributaries → Seonath, Hasdeo, Mand, Ib, Ong, Tel, Jonk
Godavari (1465km)	➤ Origin → Kasu bai hill, Nashik (MH - About 50 percent of the basin area is in this state, longest peninsular river. ➤ Tributaries → Pranhita, Indravati, Penganga, Manjra ➤ Peninsular India's longest river, the Old Ganga or Ganga of the South, the country's second largest basin.
Krishna (1400km)	➤ Origin: Mahabaleshwar, located in the Sahyadri Range (Maharashtra) ➤ Tributaries: Bhima, Tungabhadra, Koyna, Munsri, Malaprabha, Panchganga, Dudhaganga, Ghataprabha ➤ Feature: It has the largest drainage basin among the peninsular rivers. ➤ Note: The Krishna–Godavari water dispute is between Karnataka and Andhra Pradesh.
Cauvery / Kaveri (805km)	➤ Origin: Brahmagiri Hills (Karnataka); known as <i>Ponni</i> in Tamil Nadu; the fourth-largest river in South India ➤ States: Karnataka, Kerala, Tamil Nadu (The Cauvery water dispute is between Tamil Nadu and Karnataka) ➤ Feature: Shivanasamudra Waterfall (largest in terms of volume); total length – 800 km ➤ Tributaries: Kabini, Bhavani, Amaravati, Hemavati, Shimsha
Luni (450km)	➤ Origin: Aravalli Range ➤ Feature: Seasonal River; ends in the Rann of Kutch; ➤ major tributaries include Jojari, Sukri, and Jawai
Jhelum (725 km)	Origin: Verinag Spring → passes through Wular Lake → Joins chenab In the Vedas – Vitasta
Chenab (974 km)	Formed by confluence of Chandra + Bhaga rivers at Tandi (Himachal) → Largest tributary of Indus → Joins Sutlej before finally merging with Indus In the Vedas , it is referred to as Asikni .
Ravi (720 km)	Origin: Kullu Hills near Rohtang pass → drains area between Pir Panjal & Dhaola Dhar ranges
Beas (470 km)	Origin: Near Rohtang pass → Joins Sutlej River
Sutlej (1050km) (Sutudri)	Origin: Rakas's lake (Tibet) → enters Punjab via Shipki La pass → Antecedent River cutting through the Himalayas before uplift

Fact to Know:

- Nandi river flows through Tiruttani a famous pilgrimage place of South India.
- Berach River, a southern-side tributary of Banas River, originates from the hills in Udaipur, Rajasthan.
- The Galwan River is a strategic river in Ladakh, India, flowing from disputed Aksai Chin (controlled by China) to join the Shyok River, an Indus tributary.
- Pindar River is the tributary of Alaknanda.

Lakes In India

Lake	State/Union Territory	Main Features
Wular Lake	Jammu and Kashmir	India's largest and Asia's second-largest freshwater natural lake; formed due to tectonic activity; the Jhelum River flows through it.
Kodaikanal Lake	Tamil Nadu	Artificial freshwater lake.
Dal Lake	Jammu and Kashmir	Famous for houseboats and Shikaras; known as the "Jewel of Srinagar."
Pangong Tso	Ladakh	Salt Lake extending into China.
Tso Moriri, Tso Kar	Ladakh	High-altitude freshwater lakes.
Chilika Lake	Odisha (Mahanadi Delta)	Asia's largest brackish water lake; famous for flamingos; India's first Ramsar site.
Kanwar Lake	Bihar	Asia's largest freshwater oxbow lake.
Chandra Tal Lake	Himachal Pradesh	"Lake of the Moon"; Parashar Lake is also located in Himachal Pradesh.
Sasthamkotta Lake	Kerala	"Queen of Lakes"; the largest freshwater lake in Kerala.
Loktak Lake	Manipur	The largest freshwater lake in Northeast India; famous for <i>phumdis</i> ; home to the world's only floating national park.
Pookode Lake	Kerala	The smallest lake in India.
Bhojtal Lake	Madhya Pradesh	Asia's largest artificial lake.
Govind Ballabh Pant Sagar (Rihand Dam)	Uttar Pradesh	India's largest artificial lake.
Cholamu Lake	Sikkim	The highest-altitude lake in India.
Pulicat Lake	Andhra Pradesh and Tamil Nadu	India's second-largest brackish lagoon; shared by two states.
Vembanad Lake (Lagoon)	Kerala	The longest lake in India; the largest lake in Kerala.
Sambhar Lake	Rajasthan	India's largest inland Salt Lake.
Kolleru Lake	Andhra Pradesh	Seasonal freshwater lake located between the Krishna and Godavari rivers.
Nainital Lake	Uttarakhand	Crescent-shaped natural freshwater lake.
Naukuchia Tal	Nainital, UK	
Bhimtal Lake	Uttarakhand	Larger than Nainital Lake.
Renuka Lake	Himachal Pradesh	Named after Goddess Renuka.
Tsongmo (Changu) Lake	Sikkim	Glacial lake located near the Nathu La Pass.
Rudrasagar Lake	Tripura	Wetland designated under the Ramsar Convention.

Roopkund Lake	Uttarakhand	Glacial lake; known as the “Mystery Lake” due to hundreds of human skeletons found around it.
Jaisamand Lake	Rajasthan	Asia’s second-largest artificial freshwater lake; Pichola Lake is another prominent lake in Rajasthan.
Gurudongmar Lake	Sikkim	Mountain lake; a sacred pilgrimage site in Buddhism.
Keetham Lake	Uttar Pradesh	Also known as <i>Sur Sarovar</i> ; designated as a Ramsar site.
Lonar Lake (Crater Lake)	Maharashtra	India’s only lake formed by a meteor impact; the largest crater lake in the world.
Hussain Sagar Lake	Telangana	Artificial lake built on the Musi River; connects the twin cities of Hyderabad and Secunderabad.
Bhopal Lake	MP	one of the largest artificial lake of its time was built in 11 th C

Waterfalls in India

Waterfall	Location	Description
Nohkalikai Waterfall	Meghalaya	India’s highest plunge (vertical drop) waterfall.
Dudhsagar Waterfall	Goa	Four-tiered waterfall located on the Mandovi River.
Jog Waterfall	Karnataka	Situated on the Sharavathi River; also known as Gersoppa Falls.
Dhuandhar Waterfall	Madhya Pradesh	World-famous waterfall flowing through marble rocks; falls from the narrow stream of the Narmada River.
Rajrappa Waterfall	Jharkhand	Formed at the confluence with the Damodar River; known for its fascinating rock formations.
Hundru Waterfall	Jharkhand	Located in Ranchi district; surrounded by varied rock formations.
Kempty Waterfall	Uttarakhand	Situated in Tehri Garhwal district.
Shivanasamudra Waterfall	Karnataka	Located on the banks of the Cauvery River; the second-largest waterfall in India.
Kapildhara Waterfall	Madhya Pradesh	Formed at the confluence of the Kapila and Erandi rivers with the Narmada River.
Kunchikal Waterfall	Karnataka	The highest waterfall in India; formed by the Varahi River.
Duduma Waterfall	Odisha	Located on the Machkund River.
Tirathgarh Waterfall	Chhattisgarh	The highest waterfall in Chhattisgarh, situated on the Kanger River.
Chitrakote Waterfall	Chhattisgarh	Known as the “Niagara Falls of India”; located on the Indravati River.
Gatha (Gatha Seha Waterfall)	Madhya Pradesh	Fed by the Ken River.
Magod Falls	Karnataka	A group of waterfalls where the Bedti River descends.
Thalaiyar Falls	Tamil Nadu	The tallest waterfall in Tamil Nadu; also known as Rat Tail Falls.
Athirappilly Waterfall	Kerala	The largest waterfall in Kerala.

Dams & Reservoirs

- A dam is a barrier across flowing water that obstructs, directs or retards the flow, often creating a reservoir, lake or impoundment.

14

CHAPTER

English Alphabet Test



- This chapter includes questions based on the English alphabet (A–Z). Candidates should know the positions of all 26 letters and basic related concepts clearly.
- **Letters are of two types:**
 - ✓ Vowels – A, E, I, O, U (There are 5 vowels in the English alphabet.)

- ✓ Consonants – B, C, D, F, G, H, J, K, L, M, N, P, Q, R, S, T, V, W, X, Y, Z (There are 21 consonants in the English alphabet.)

➤ **The alphabet is divided into two halves:**

- ✓ First Half – A to M (The first half contains 13 letters, i.e., positions 1 to 13.)
- ✓ Second Half – N to Z (The second half contains 13 letters, i.e., positions 14 to 26.)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26

Short trick:

- **EJOTY** (इजोटी)

5	10	15	20	25
E	J	O	T	Y

- **CFILORUX** (सिफिलोरक्स)

3	6	9	12	15	18	21	24
C	F	I	L	O	R	U	X

- **Finding letters from the right side can be simplified using the formula:**

- ✓ Position from left = 27 – Position from right

- **Trick to Remember Opposite Letters**

Pair	AZ	BY	CX	DW	EV	FU	GT
Trick	AZ	BYe	Cracks	DeW	EVening	Few / Uff	G.T. Road

Pair	HS	IR	JQ	KP	LO	MN
Trick	High School	Indian Railway	Jaipur Queen	KanPur	Life OK	MaN

Type-1 Position of a Letter in the English Alphabet

- If counting in the **same direction** (left to left or right to right), **subtract** both positions.
- If counting in **opposite directions** (left to right or right to left), **add** both positions.

Ex: In the English alphabet, what is the 10th letter to the left of the 21st letter from the left?

Ans: Using the trick: If counting in the same direction (left to left or right to right), subtract both positions.

English alphabet = 21-10= 11th alphabet = K

Ex: In the English alphabet, what is the 9th letter to the left of the 11th letter from the right?

Ans: In these types of question first we calculate from the left and then subtract from the 27.

Alphabet = $11 + 9 = 20^{\text{th}}$ from the left

Original alphabet = $27 - 20 = 7^{\text{th}}$ alphabet = G

Type-2 Forming Letter Pairs

- The letter pair can be formed in both forward and backward directions.
- Multiple pairs can be created from a single word.
- After forming a pair with a letter, you can form another pair with the same letter if they are at the same distance according to the English alphabet.

Ex: How many such pairs of letters are there in the word 'COMBINE', each of which has as many letters between them in the word (both forward and backward direction) as they have between them in the English Alphabet?

Ans: First of all, we will write number of positions of 'COMBINE' word according to English alphabet i.e. C is written as 3 and O will be written as 15 and so on.

C	O	M	B	I	N	E
3	15	13	2	9	14	5

Here we can see that only B and E is making one pair.

Type-3 Letter Problems

Ex: If the first and eighth letters of the word 'REPRESENTATIVE' are swapped, then the second and ninth letters, and so on, are also swapped, what will be the fourth letter to the left of the 6th letter from the left in the new arrangement?

Ans:

Position	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Original Letter	R	E	P	R	E	S	E	N	T	A	T	I	V	E
New Letter	N	T	A	T	I	V	E	R	E	P	R	E	S	E

Fourth letter to the left of the 6th letter from the left = $6 - 2 = 4^{\text{th}} = \text{T}$

Type-4 Arrangement of English Words

- Arranging English words in alphabetical or dictionary order is called arrangement of words.

Ex: Arrange the following words according to English dictionary arrangement:

(A) Epitaxy (B) Episode (C) Epigene

(D) Epitome (E) Epilogue

Ans: In a Dictionary, every word is arranged alphabetically. Also, in each word each and every letter is positioned alphabetically. So here, dictionary the arrangement of words in a Dictionary, every word is arranged alphabetically.

(C) Epigene (E) Epilogue (B) Episode

(A) Epitaxy (D) Epitome

Therefore, the correct answer is (C), (E), (B), (A), (D)

Type-5 Meaningful Logical Order of Words

Ex: How many meaningful words of 5 letters can be made with the alphabets K, E, D, H, I each being used only once in each word?

Ans: Given letters: K, E, D, H, I

Meaningful word can be formed out of the alphabets K, E, D, H, I:

HIKED: Walk for a long distance, Hence, only one such word is possible.

Ex: If a five-letter meaningful word can be formed by using the first, third, fifth, sixth and eighth letters from the word "HALLOWEEN", then what is the last letter from the left end of the newly formed word?

Ans: The 1st, 3rd, 5th, 6th, and 8th letters from the left end of the word "HALLOWEEN" are H, L, O, W, and E respectively. The only five-letter meaningful word that can be formed using the letters is WHOLE.



Number and Alphabet Series Test



- A series is a systematic arrangement of numbers or letters within a defined group. In competitive exams, sequences of numbers, letters, or a mix of both are presented. One position in the sequence is either left blank or contains an incorrect number or letter. Candidates are tasked with completing the series by selecting the correct option to fill the blank or identify the incorrect element.

Here's a clearer and concise way to solve number series problems:

- **Look for Patterns:** Check if the numbers are increasing or decreasing by a constant (addition/subtraction) or multiplied/divided by a constant (multiplication/division).
- **Find Differences:**
- ✓ If the difference between consecutive numbers is the same, it's an arithmetic series (e.g., 2, 5, 8, 11).
 - ✓ If the second difference (difference of differences) is constant, it's a quadratic series.
- **Check for Multiplication/Division:** Look if each number is multiplied or divided by a constant to get the next number (e.g., 3, 6, 12, 24 where each number is doubled).
- **Recognize Special Sequences:**
- ✓ **Squares:** 1, 4, 9, 16, ...
 - ✓ **Cubes:** 1, 8, 27, ...
 - ✓ **Fibonacci:** Each number is the sum of the two preceding ones (e.g., 0, 1, 1, 2, 3, 5).
- **Check for Ratios:** If the numbers increase by a constant ratio, it's a geometric progression (e.g., 2, 4, 8, 16).
- **Test the Options:** If options are provided, check which one follows the identified pattern.

Type-1 Series in Increasing Order

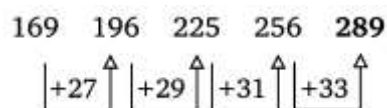
Ex: In the following question, select the missing number from the given series.



169, 196, 225, 256, _?

1. 289 2. 324
3. 441 4. 361

Ans:

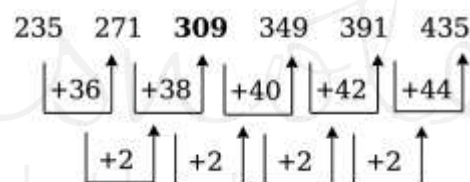


Ex: Which of the following numbers will replace the question mark (?) in the given series?

235, 271, ?, 349, 391, 435

1. 311 2. 307
3. 313 4. 309

Ans:

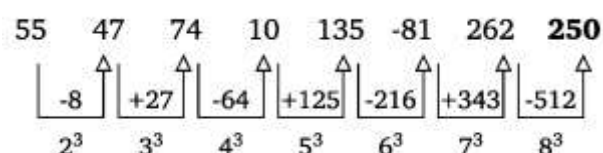


Ex: What number should replace question Mark (?) in the series given below.

55, 47, 74, 10, 135, -81, 262, ?

1. 774 2. -250
3. 343 4. -343

Ans:

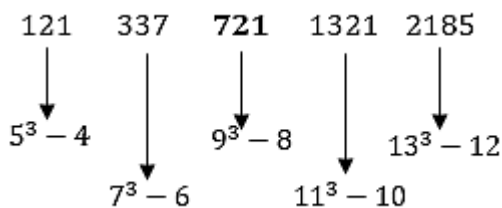


Ex: Find the missing number in the following series:

121, 337, ?, 1321, 2185

1. 713 2. 720
3. 721 4. 737

Ans:



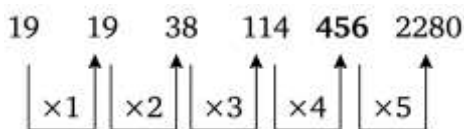
Type-2 Multiplication Based Increasing Series

Ex: Select the number from among the given options that can replace the question mark (?) in the following series.

19, 19, 38, 114, ?, 2280

1. 344 2. 1140
3. 456 4. 224

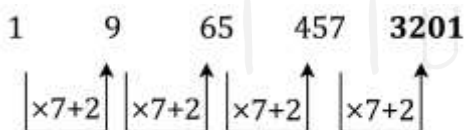
Ans:



Ex: Which of the following numbers will replace the question mark (?) in the given series?

1. 9, 65, 457, ?
1. 4258 2. 3125
3. 3201 4. 5289

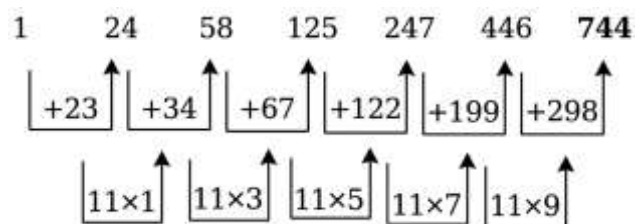
Ans:



Ex: Which of the following numbers will replace the question mark (?) in the given series?

1. 24, 58, 125, 247, 446, ?
1. 774 2. 747
3. 744 4. 777

Ans:

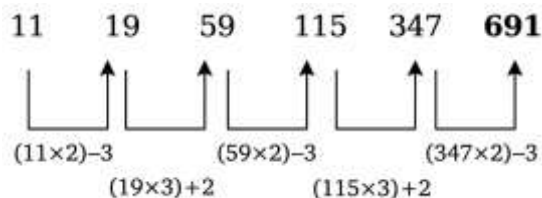


Ex: Select the number from among the given options that can replace the question mark (?) in the following series.

11, 19, 59, 115, 347, ?

1. 697 2. 619
3. 679 4. 691

Ans:



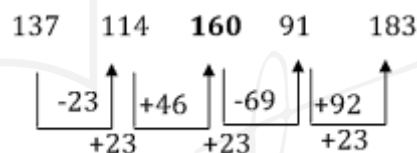
Type-3 Addition and Subtraction Series

Ex: Which of the following number will replace the question mark (?) in the given series?

137, 114, ?, 91, 183

1. 145 2. 160
3. 125 4. 112

Ans:

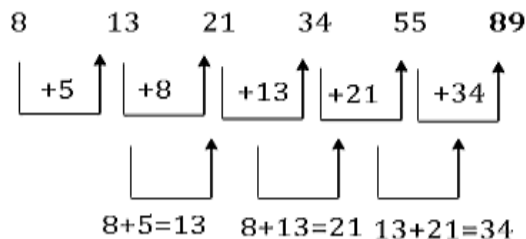


Ex: Which of the following numbers will replace the question mark (?) in the given series?

8, 13, 21, 34, 55, ?

1. 74 2. 68 3. 72 4. 89

Ans:



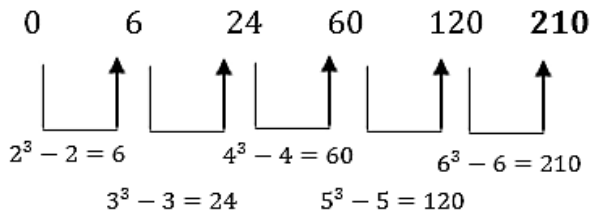
Type-4 Square and Cube Based Series

Ex: Find the next term of the series:

0, 6, 24, 60, 120, ?

1. 180 2. 210
3. 216 4. 240

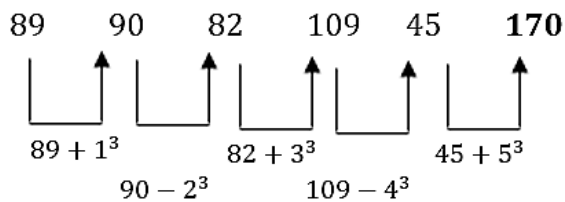
Ans:



Ex: Which number will replace the question mark (?) in the following series?

89, 90, 82, 109, 45, ?

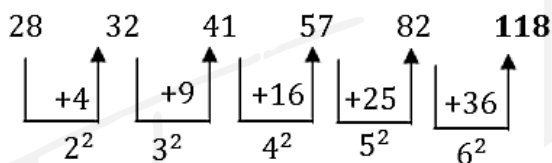
Ans:



Ex: Which number will replace the question mark (?) in the following series?

28, 32, 41, 57, 82, ?

Ans:

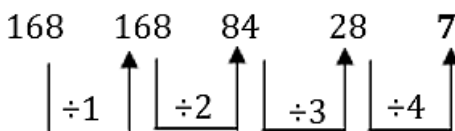


Type-5 Division Based Decreasing Series

Ex: Which number will replace the question mark (?) in the following number series?

168, 168, 84, 28, ?

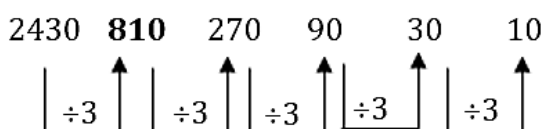
Ans:



Ex: Which number will replace the question mark (?) in the following series?

2430, ?, 270, 90, 30, 10

Ans:



Type-6 Mixed Number Series

Ex: Find the next terms 11, 13, 17, 19, 23, _?

1. 27 2. 29
3. 31 4. 33

Ans:

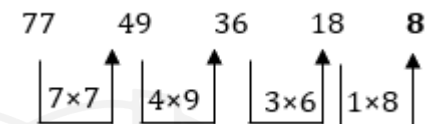
11 → Prime number
13 → Prime number
17 → Prime number
19 → Prime number
23 → Prime number
Next prime number = 29

Ex: What will come in place of the question mark (?) in the following series?

77, 49, 36, 18, ?

1. 10 2. 12
3. 8 4. 16

Ans:

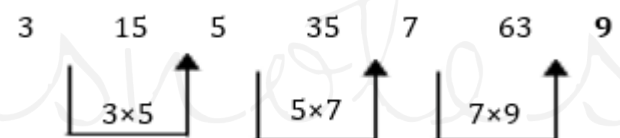


Ex: What will come in place of the question mark (?) in the following series?

3, 15, 5, 35, 7, 63, ?

1. 10 2. 126
3. 9 4. 84

Ans:

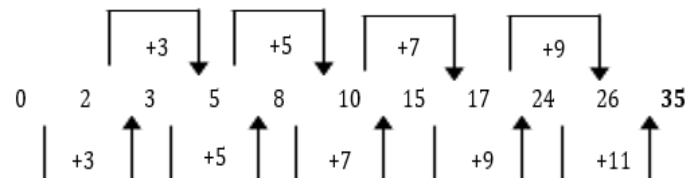


Ex: In the following series, what comes in place of the question mark (?)?

0, 2, 3, 5, 8, 10, 15, 17, 24, 26, ?

1. 28 2. 30
3. 32 4. 35

Ans:



Ex: Select the number from among the given options that can replace the question mark (?) in the following series.

62, 74, 80, 86, 95, ?, 158

1. 113 2. 100
3. 108 4. 122