

ANALYTICAL ADMINISTRATION
DEPARTMENT OF ADMINISTRATION
FIDAL

EXTRACTING THE PROS

Protein concentration: 100 μ g/ml

1990-1991 1991-1992 1992-1993 1993-1994 1994-1995 1995-1996 1996-1997 1997-1998 1998-1999 1999-2000 2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023 2023-2024 2024-2025 2025-2026 2026-2027 2027-2028 2028-2029 2029-2030 2030-2031 2031-2032 2032-2033 2033-2034 2034-2035 2035-2036 2036-2037 2037-2038 2038-2039 2039-2040 2040-2041 2041-2042 2042-2043 2043-2044 2044-2045 2045-2046 2046-2047 2047-2048 2048-2049 2049-2050 2050-2051 2051-2052 2052-2053 2053-2054 2054-2055 2055-2056 2056-2057 2057-2058 2058-2059 2059-2060 2060-2061 2061-2062 2062-2063 2063-2064 2064-2065 2065-2066 2066-2067 2067-2068 2068-2069 2069-2070 2070-2071 2071-2072 2072-2073 2073-2074 2074-2075 2075-2076 2076-2077 2077-2078 2078-2079 2079-2080 2080-2081 2081-2082 2082-2083 2083-2084 2084-2085 2085-2086 2086-2087 2087-2088 2088-2089 2089-2090 2090-2091 2091-2092 2092-2093 2093-2094 2094-2095 2095-2096 2096-2097 2097-2098 2098-2099 2099-2100 2100-2101 2101-2102 2102-2103 2103-2104 2104-2105 2105-2106 2106-2107 2107-2108 2108-2109 2109-2110 2110-2111 2111-2112 2112-2113 2113-2114 2114-2115 2115-2116 2116-2117 2117-2118 2118-2119 2119-2120 2120-2121 2121-2122 2122-2123 2123-2124 2124-2125 2125-2126 2126-2127 2127-2128 2128-2129 2129-2130 2130-2131 2131-2132 2132-2133 2133-2134 2134-2135 2135-2136 2136-2137 2137-2138 2138-2139 2139-2140 2140-2141 2141-2142 2142-2143 2143-2144 2144-2145 2145-2146 2146-2147 2147-2148 2148-2149 2149-2150 2150-2151 2151-2152 2152-2153 2153-2154 2154-2155 2155-2156 2156-2157 2157-2158 2158-2159 2159-2160 2160-2161 2161-2162 2162-2163 2163-2164 2164-2165 2165-2166 2166-2167 2167-2168 2168-2169 2169-2170 2170-2171 2171-2172 2172-2173 2173-2174 2174-2175 2175-2176 2176-2177 2177-2178 2178-2179 2179-2180 2180-2181 2181-2182 2182-2183 2183-2184 2184-2185 2185-2186 2186-2187 2187-2188 2188-2189 2189-2190 2190-2191 2191-2192 2192-2193 2193-2194 2194-2195 2195-2196 2196-2197 2197-2198 2198-2199 2199-2200 2200-2201 2201-2202 2202-2203 2203-2204 2204-2205 2205-2206 2206-2207 2207-2208 2208-2209 2209-2210 2210-2211 2211-2212 2212-2213 2213-2214 2214-2215 2215-2216 2216-2217 2217-2218 2218-2219 2219-2220 2220-2221 2221-2222 2222-2223 2223-2224 2224-2225 2225-2226 2226-2227 2227-2228 2228-2229 2229-2230 2230-2231 2231-2232 2232-2233 2233-2234 2234-2235 2235-2236 2236-2237 2237-2238 2238-2239 2239-2240 2240-2241 2241-2242 2242-2243 2243-2244 2244-2245 2245-2246 2246-2247 2247-2248 2248-2249 2249-2250 2250-2251 2251-2252 2252-2253 2253-2254 2254-2255 2255-2256 2256-2257 2257-2258 2258-2259 2259-2260 2260-2261 2261-2262 2262-2263 2263-2264 2264-2265 2265-2266 2266-2267 2267-2268 2268-2269 2269-2270 2270-2271 2271-2272 2272-2273 2273-2274 2274-2275 2275-2276 2276-2277 2277-2278 2278-2279 2279-2280 2280-2281 2281-2282 2282-2283 2283-2284 2284-2285 2285-2286 2286-2287 2287-2288 2288-2289 2289-2290 2290-2291 2291-2292 2292-2293 2293-2294 2294-2295 2295-2296 2296-2297 2297-2298 2298-2299 2299-2300 2300-2301 2301-2302 2302-2303 2303-2304 2304-2305 2305-2306 2306-2307 2307-2308 2308-2309 2309-2310 2310-2311 2311-2312 2312-2313 2313-2314 2314-2315 2315-2316 2316-2317 2317-2318 2318-2319 2319-2320 2320-2321 2321-2322 2322-2323 2323-2324 2324-2325 2325-2326 2326-2327 2327-2328 2328-2329 2329-2330 2330-2331 2331-2332 2332-2333 2333-2334 2334-2335 2335-2336 2336-2337 2337-2338 2338-2339 2339-2340 2340-2341 2341-2342 2342-2343 2343-2344 2344-2345 2345-2346 2346-2347 2347-2348 2348-2349 2349-2350 2350-2351 2351-2352 2352-2353 2353-2354 2354-2355 2355-2356 2356-2357 2357-2358 2358-2359 2359-2360 2360-2361 2361-2362 2362-2363 2363-2364 2364-2365 2365-2366 2366-2367 2367-2368 2368-2369 2369-2370 2370-2371 2371-2372 2372-2373 2373-2374 2374-2375 2375-2376 2376-2377 2377-2378 2378-2379 2379-2380 2380-2381 2381-2382 2382-2383 2383-2384 2384-2385 2385-2386 2386-2387 2387-2388 2388-2389 2389-2390 2390-2391 2391-2392 2392-2393 2393-2394 2394-2395 2395-2396 2396-2397 2397-2398 2398-2399 2

1. THEORY OF THE EARTH
 2. THEORY OF THE EARTH
 3. THEORY OF THE EARTH
 4. THEORY OF THE EARTH

The theory of the earth is a branch of geology which deals with the origin and development of the earth and its various parts. It is a science which seeks to explain the causes and effects of the various geological phenomena which we observe in nature.

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1. The following are the results of a survey of 100 people who were asked to rate their satisfaction with the service provided by a company. The results are as follows:

1

2. The following are the results of a survey of 100 people who were asked to rate their satisfaction with the service provided by a company. The results are as follows:

2

3. The following are the results of a survey of 100 people who were asked to rate their satisfaction with the service provided by a company. The results are as follows:

3

4. The following are the results of a survey of 100 people who were asked to rate their satisfaction with the service provided by a company. The results are as follows:

4

5. The following are the results of a survey of 100 people who were asked to rate their satisfaction with the service provided by a company. The results are as follows:

6. The following are the results of a survey of 100 people who were asked to rate their satisfaction with the service provided by a company. The results are as follows:

7. The following are the results of a survey of 100 people who were asked to rate their satisfaction with the service provided by a company. The results are as follows:

5

8. The following are the results of a survey of 100 people who were asked to rate their satisfaction with the service provided by a company. The results are as follows:

6



6

2. 证明: 若 $f(x)$ 在 $[a, b]$ 上连续, 且 $f(a) = f(b)$, 则存在 $\xi \in (a, b)$ 使得 $f'(\xi) = 0$.

证: 由题设知 $f(x)$ 在 $[a, b]$ 上连续.

由 $f(a) = f(b)$ 知 $f(x)$ 在 $[a, b]$ 上满足罗尔定理的条件, 故存在 $\xi \in (a, b)$ 使得 $f'(\xi) = 0$.

证毕.

3. 证明: 若 $f(x)$ 在 $[a, b]$ 上连续, 且 $f(a) = f(b)$, 则存在 $\xi \in (a, b)$ 使得 $f'(\xi) = 0$.

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证毕.

20.11

20.11.1. $\frac{1}{2} \log 2 = 0.3466$ $\frac{1}{2} \log 3 = 0.4771$ $\frac{1}{2} \log 4 = 0.6021$ $\frac{1}{2} \log 5 = 0.6990$ $\frac{1}{2} \log 6 = 0.7782$ $\frac{1}{2} \log 7 = 0.8451$ $\frac{1}{2} \log 8 = 0.9031$ $\frac{1}{2} \log 9 = 0.9542$ $\frac{1}{2} \log 10 = 1.0000$

20.11.2. $\frac{1}{2} \log 11 = 1.0414$ $\frac{1}{2} \log 12 = 1.0792$ $\frac{1}{2} \log 13 = 1.1139$ $\frac{1}{2} \log 14 = 1.1462$ $\frac{1}{2} \log 15 = 1.1761$ $\frac{1}{2} \log 16 = 1.2041$ $\frac{1}{2} \log 17 = 1.2304$ $\frac{1}{2} \log 18 = 1.2553$ $\frac{1}{2} \log 19 = 1.2792$ $\frac{1}{2} \log 20 = 1.3010$

20.11.3. $\frac{1}{2} \log 21 = 1.3222$ $\frac{1}{2} \log 22 = 1.3424$ $\frac{1}{2} \log 23 = 1.3612$ $\frac{1}{2} \log 24 = 1.3792$ $\frac{1}{2} \log 25 = 1.3979$ $\frac{1}{2} \log 26 = 1.4161$ $\frac{1}{2} \log 27 = 1.4338$ $\frac{1}{2} \log 28 = 1.4510$ $\frac{1}{2} \log 29 = 1.4678$ $\frac{1}{2} \log 30 = 1.4840$

20.11.4. $\frac{1}{2} \log 31 = 1.4999$ $\frac{1}{2} \log 32 = 1.5146$ $\frac{1}{2} \log 33 = 1.5289$ $\frac{1}{2} \log 34 = 1.5428$ $\frac{1}{2} \log 35 = 1.5563$ $\frac{1}{2} \log 36 = 1.5694$ $\frac{1}{2} \log 37 = 1.5821$ $\frac{1}{2} \log 38 = 1.5944$ $\frac{1}{2} \log 39 = 1.6063$ $\frac{1}{2} \log 40 = 1.6180$

20.11.5. $\frac{1}{2} \log 41 = 1.6294$ $\frac{1}{2} \log 42 = 1.6405$ $\frac{1}{2} \log 43 = 1.6512$ $\frac{1}{2} \log 44 = 1.6616$ $\frac{1}{2} \log 45 = 1.6717$ $\frac{1}{2} \log 46 = 1.6815$ $\frac{1}{2} \log 47 = 1.6910$ $\frac{1}{2} \log 48 = 1.7003$ $\frac{1}{2} \log 49 = 1.7093$ $\frac{1}{2} \log 50 = 1.7181$

20.11.6. $\frac{1}{2} \log 51 = 1.7267$ $\frac{1}{2} \log 52 = 1.7350$ $\frac{1}{2} \log 53 = 1.7431$ $\frac{1}{2} \log 54 = 1.7509$ $\frac{1}{2} \log 55 = 1.7585$ $\frac{1}{2} \log 56 = 1.7660$ $\frac{1}{2} \log 57 = 1.7733$ $\frac{1}{2} \log 58 = 1.7804$ $\frac{1}{2} \log 59 = 1.7872$ $\frac{1}{2} \log 60 = 1.7938$

20.11.7. $\frac{1}{2} \log 61 = 1.8002$ $\frac{1}{2} \log 62 = 1.8065$ $\frac{1}{2} \log 63 = 1.8126$ $\frac{1}{2} \log 64 = 1.8185$ $\frac{1}{2} \log 65 = 1.8242$ $\frac{1}{2} \log 66 = 1.8297$ $\frac{1}{2} \log 67 = 1.8350$ $\frac{1}{2} \log 68 = 1.8401$ $\frac{1}{2} \log 69 = 1.8451$ $\frac{1}{2} \log 70 = 1.8500$

20.11.8. $\frac{1}{2} \log 71 = 1.8548$ $\frac{1}{2} \log 72 = 1.8594$ $\frac{1}{2} \log 73 = 1.8638$ $\frac{1}{2} \log 74 = 1.8681$ $\frac{1}{2} \log 75 = 1.8723$ $\frac{1}{2} \log 76 = 1.8764$ $\frac{1}{2} \log 77 = 1.8804$ $\frac{1}{2} \log 78 = 1.8843$ $\frac{1}{2} \log 79 = 1.8881$ $\frac{1}{2} \log 80 = 1.8918$

20.11.9. $\frac{1}{2} \log 81 = 1.8954$ $\frac{1}{2} \log 82 = 1.9089$ $\frac{1}{2} \log 83 = 1.9122$ $\frac{1}{2} \log 84 = 1.9154$ $\frac{1}{2} \log 85 = 1.9185$ $\frac{1}{2} \log 86 = 1.9215$ $\frac{1}{2} \log 87 = 1.9244$ $\frac{1}{2} \log 88 = 1.9272$ $\frac{1}{2} \log 89 = 1.9300$ $\frac{1}{2} \log 90 = 1.9326$

20.11.10. $\frac{1}{2} \log 91 = 1.9351$ $\frac{1}{2} \log 92 = 1.9375$ $\frac{1}{2} \log 93 = 1.9398$ $\frac{1}{2} \log 94 = 1.9420$ $\frac{1}{2} \log 95 = 1.9441$ $\frac{1}{2} \log 96 = 1.9462$ $\frac{1}{2} \log 97 = 1.9482$ $\frac{1}{2} \log 98 = 1.9502$ $\frac{1}{2} \log 99 = 1.9521$ $\frac{1}{2} \log 100 = 1.9539$

20.11.11. $\frac{1}{2} \log 101 = 1.9556$ $\frac{1}{2} \log 102 = 1.9572$ $\frac{1}{2} \log 103 = 1.9588$ $\frac{1}{2} \log 104 = 1.9603$ $\frac{1}{2} \log 105 = 1.9618$ $\frac{1}{2} \log 106 = 1.9633$ $\frac{1}{2} \log 107 = 1.9647$ $\frac{1}{2} \log 108 = 1.9661$ $\frac{1}{2} \log 109 = 1.9675$ $\frac{1}{2} \log 110 = 1.9688$

20.11.12. $\frac{1}{2} \log 111 = 1.9701$ $\frac{1}{2} \log 112 = 1.9714$ $\frac{1}{2} \log 113 = 1.9727$ $\frac{1}{2} \log 114 = 1.9740$ $\frac{1}{2} \log 115 = 1.9752$ $\frac{1}{2} \log 116 = 1.9764$ $\frac{1}{2} \log 117 = 1.9776$ $\frac{1}{2} \log 118 = 1.9788$ $\frac{1}{2} \log 119 = 1.9799$ $\frac{1}{2} \log 120 = 1.9810$

20.11.13. $\frac{1}{2} \log 121 = 1.9820$ $\frac{1}{2} \log 122 = 1.9831$ $\frac{1}{2} \log 123 = 1.9842$ $\frac{1}{2} \log 124 = 1.9852$ $\frac{1}{2} \log 125 = 1.9862$ $\frac{1}{2} \log 126 = 1.9872$ $\frac{1}{2} \log 127 = 1.9882$ $\frac{1}{2} \log 128 = 1.9891$ $\frac{1}{2} \log 129 = 1.9901$ $\frac{1}{2} \log 130 = 1.9910$

20.11.14. $\frac{1}{2} \log 131 = 1.9919$ $\frac{1}{2} \log 132 = 1.9928$ $\frac{1}{2} \log 133 = 1.9937$ $\frac{1}{2} \log 134 = 1.9946$ $\frac{1}{2} \log 135 = 1.9955$ $\frac{1}{2} \log 136 = 1.9964$ $\frac{1}{2} \log 137 = 1.9973$ $\frac{1}{2} \log 138 = 1.9981$ $\frac{1}{2} \log 139 = 1.9990$ $\frac{1}{2} \log 140 = 1.9998$

20.11.15. $\frac{1}{2} \log 141 = 2.0006$ $\frac{1}{2} \log 142 = 2.0014$ $\frac{1}{2} \log 143 = 2.0022$ $\frac{1}{2} \log 144 = 2.0030$ $\frac{1}{2} \log 145 = 2.0037$ $\frac{1}{2} \log 146 = 2.0045$ $\frac{1}{2} \log 147 = 2.0052$ $\frac{1}{2} \log 148 = 2.0059$ $\frac{1}{2} \log 149 = 2.0066$ $\frac{1}{2} \log 150 = 2.0073$

20.11.16. $\frac{1}{2} \log 151 = 2.0080$ $\frac{1}{2} \log 152 = 2.0087$ $\frac{1}{2} \log 153 = 2.0094$ $\frac{1}{2} \log 154 = 2.0101$ $\frac{1}{2} \log 155 = 2.0107$ $\frac{1}{2} \log 156 = 2.0114$ $\frac{1}{2} \log 157 = 2.0121$ $\frac{1}{2} \log 158 = 2.0127$ $\frac{1}{2} \log 159 = 2.0134$ $\frac{1}{2} \log 160 = 2.0140$

20.11.17. $\frac{1}{2} \log 161 = 2.0146$ $\frac{1}{2} \log 162 = 2.0152$ $\frac{1}{2} \log 163 = 2.0158$ $\frac{1}{2} \log 164 = 2.0164$ $\frac{1}{2} \log 165 = 2.0170$ $\frac{1}{2} \log 166 = 2.0176$ $\frac{1}{2} \log 167 = 2.0182$ $\frac{1}{2} \log 168 = 2.0187$ $\frac{1}{2} \log 169 = 2.0193$ $\frac{1}{2} \log 170 = 2.0198$

20.11.18. $\frac{1}{2} \log 171 = 2.0204$ $\frac{1}{2} \log 172 = 2.0210$ $\frac{1}{2} \log 173 = 2.0215$ $\frac{1}{2} \log 174 = 2.0221$ $\frac{1}{2} \log 175 = 2.0226$ $\frac{1}{2} \log 176 = 2.0231$ $\frac{1}{2} \log 177 = 2.0236$ $\frac{1}{2} \log 178 = 2.0242$ $\frac{1}{2} \log 179 = 2.0247$ $\frac{1}{2} \log 180 = 2.0252$

4. **Representing integers**

Let a be an integer. Then a can be written uniquely in the form

$$a = 10^k \cdot \frac{a}{10^k} \quad \text{where } k \in \mathbb{Z} \text{ and } \frac{a}{10^k} \text{ is an integer not divisible by } 10.$$

5. **Representing real numbers**

Let x be a real number. Then x can be written uniquely in the form

$$x = 10^k \cdot \frac{x}{10^k} \quad \text{where } k \in \mathbb{Z} \text{ and } \frac{x}{10^k} \text{ is a real number not divisible by } 10.$$

Let x be a real number. Then x can be written uniquely in the form

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6. **Representing rational numbers**

Let x be a rational number. Then x can be written uniquely in the form

$$x = 10^k \cdot \frac{x}{10^k} \quad \text{where } k \in \mathbb{Z} \text{ and } \frac{x}{10^k} \text{ is a rational number not divisible by } 10.$$

$$\frac{x}{10^k} = \frac{a}{b} \quad \text{where } a, b \in \mathbb{Z} \text{ and } b \neq 0.$$

Let x be a rational number. Then x can be written uniquely in the form

$$x = 10^k \cdot \frac{x}{10^k} \quad \text{where } k \in \mathbb{Z} \text{ and } \frac{x}{10^k} \text{ is a rational number not divisible by } 10.$$

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$$x = 10^k \cdot \frac{x}{10^k} \quad \text{where } k \in \mathbb{Z} \text{ and } \frac{x}{10^k} \text{ is a rational number not divisible by } 10.$$

1. The first part of the problem is to find the value of x such that $x^2 + 1 = 0$. This is a quadratic equation, and we can solve it by using the quadratic formula.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-0 \pm \sqrt{0^2 - 4(1)(1)}}{2(1)} = \frac{\pm \sqrt{-4}}{2} = \frac{\pm 2i}{2} = \pm i$$

2. The second part of the problem is to find the value of y such that $y^2 + 1 = 0$. This is a quadratic equation, and we can solve it by using the quadratic formula.

3. The third part of the problem is to find the value of z such that $z^2 + 1 = 0$. This is a quadratic equation, and we can solve it by using the quadratic formula.

$$z = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-0 \pm \sqrt{0^2 - 4(1)(1)}}{2(1)} = \frac{\pm \sqrt{-4}}{2} = \frac{\pm 2i}{2} = \pm i$$

$$z = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-0 \pm \sqrt{0^2 - 4(1)(1)}}{2(1)} = \frac{\pm \sqrt{-4}}{2} = \frac{\pm 2i}{2} = \pm i$$

$$z = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-0 \pm \sqrt{0^2 - 4(1)(1)}}{2(1)} = \frac{\pm \sqrt{-4}}{2} = \frac{\pm 2i}{2} = \pm i$$

4. The fourth part of the problem is to find the value of w such that $w^2 + 1 = 0$. This is a quadratic equation, and we can solve it by using the quadratic formula.

$$w = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-0 \pm \sqrt{0^2 - 4(1)(1)}}{2(1)} = \frac{\pm \sqrt{-4}}{2} = \frac{\pm 2i}{2} = \pm i$$

5. The fifth part of the problem is to find the value of v such that $v^2 + 1 = 0$. This is a quadratic equation, and we can solve it by using the quadratic formula.

$$v = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-0 \pm \sqrt{0^2 - 4(1)(1)}}{2(1)} = \frac{\pm \sqrt{-4}}{2} = \frac{\pm 2i}{2} = \pm i$$

$$v = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-0 \pm \sqrt{0^2 - 4(1)(1)}}{2(1)} = \frac{\pm \sqrt{-4}}{2} = \frac{\pm 2i}{2} = \pm i$$

$$v = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-0 \pm \sqrt{0^2 - 4(1)(1)}}{2(1)} = \frac{\pm \sqrt{-4}}{2} = \frac{\pm 2i}{2} = \pm i$$

6. The sixth part of the problem is to find the value of u such that $u^2 + 1 = 0$. This is a quadratic equation, and we can solve it by using the quadratic formula.

$$u = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-0 \pm \sqrt{0^2 - 4(1)(1)}}{2(1)} = \frac{\pm \sqrt{-4}}{2} = \frac{\pm 2i}{2} = \pm i$$

10. Find the type and exact form of the surface

$$x^2 + y^2 + 2x + 4y + 2z = 0 \quad (1)$$

11. Find the exact form of the surface

$$x^2 + y^2 + 2x + 4y + 2z = 0 \quad (2)$$

12. Find the exact form of the surface

$$x^2 + y^2 + 2x + 4y + 2z = 0 \quad (3)$$

13. Find the exact form of the surface

$$x^2 + y^2 + 2x + 4y + 2z = 0 \quad (4)$$

$$x^2 + y^2 + 2x + 4y + 2z = 0 \quad (5)$$

14. Find the exact form of the surface

$$x^2 + y^2 + 2x + 4y + 2z = 0 \quad (6)$$

15. Find the exact form of the surface

$$x^2 + y^2 + 2x + 4y + 2z = 0 \quad (7)$$

16. Find the exact form of the surface

$$x^2 + y^2 + 2x + 4y + 2z = 0 \quad (8)$$

$$x^2 + y^2 + 2x + 4y + 2z = 0 \quad (9)$$

1. Find the inverse of the matrix

$$A = \begin{pmatrix} 1 & 2 & 3 \\ 2 & 3 & 4 \\ 3 & 4 & 5 \end{pmatrix}$$

$$A^{-1} = \frac{1}{|A|} \text{adj}(A)$$

$$|A| = \begin{vmatrix} 1 & 2 & 3 \\ 2 & 3 & 4 \\ 3 & 4 & 5 \end{vmatrix} = 1(15-12) - 2(10-12) + 3(10-9) = 3 + 4 + 3 = 10$$

2. Find the inverse of the matrix

$$B = \begin{pmatrix} 1 & 2 & 3 & 4 \\ 2 & 3 & 4 & 5 \\ 3 & 4 & 5 & 6 \\ 4 & 5 & 6 & 7 \end{pmatrix}$$

3. Find the inverse of the matrix

$$C = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 2 & 3 & 4 & 5 & 6 \\ 3 & 4 & 5 & 6 & 7 \\ 4 & 5 & 6 & 7 & 8 \\ 5 & 6 & 7 & 8 & 9 \end{pmatrix}$$

4. Find the inverse of the matrix

$$D = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 2 & 3 & 4 & 5 & 6 & 7 \\ 3 & 4 & 5 & 6 & 7 & 8 \\ 4 & 5 & 6 & 7 & 8 & 9 \\ 5 & 6 & 7 & 8 & 9 & 10 \\ 6 & 7 & 8 & 9 & 10 & 11 \end{pmatrix}$$

5. Find the inverse of the matrix

$$E = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 2 & 3 & 4 & 5 & 6 \\ 3 & 4 & 5 & 6 & 7 \\ 4 & 5 & 6 & 7 & 8 \\ 5 & 6 & 7 & 8 & 9 \end{pmatrix}$$

$$\begin{pmatrix} 1 & 2 & 3 \\ 2 & 3 & 4 \\ 3 & 4 & 5 \end{pmatrix}$$

$$\begin{pmatrix} 1 & 2 \\ 2 & 3 \end{pmatrix}$$

10. Find the value of x in the following figure.

11. Find the value of x in the following figure.

12. Find the value of x in the following figure.



13. Find the value of x in the following figure.

14. Find the value of x in the following figure.

15. Find the value of x in the following figure.

16. Find the value of x in the following figure.



1. Procedure:

$$x_1 = 1, x_2 = 1, x_3 = 1, x_4 = 1, x_5 = 1, x_6 = 1, x_7 = 1, x_8 = 1$$

$$\begin{array}{c|c|c} \begin{array}{l} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} & \begin{array}{l} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} & \begin{array}{l} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} \end{array}$$

$$x_1 = 1, x_2 = 1, x_3 = 1, x_4 = 1, x_5 = 1, x_6 = 1, x_7 = 1, x_8 = 1$$

1.0000000000000000

$$x_1 = 1, x_2 = 1, x_3 = 1, x_4 = 1, x_5 = 1, x_6 = 1, x_7 = 1, x_8 = 1$$

$$\begin{array}{c|c|c} \begin{array}{l} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} & \begin{array}{l} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} & \begin{array}{l} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} \end{array}$$

1.0000000000000000

$$x_1 = 1, x_2 = 1, x_3 = 1, x_4 = 1, x_5 = 1, x_6 = 1, x_7 = 1, x_8 = 1$$

$$\begin{array}{c|c|c} \begin{array}{l} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} & \begin{array}{l} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} & \begin{array}{l} 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \end{array} \end{array}$$

D. Same volume

(1) 100 g 100 g 100 g 100 g 100 g 100 g 100 g 100 g 100 g 100 g



(3) 100 g 100 g 100 g 100 g 100 g 100 g 100 g 100 g 100 g 100 g

(1) 100 g 100 g 100 g 100 g 100 g 100 g 100 g 100 g 100 g 100 g



E. Same volume

(1) 100 g 100 g 100 g 100 g 100 g 100 g 100 g 100 g 100 g 100 g



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100% 250% 500% 750% 1000% 1250% 1500% 1750% 2000%

[illegible]

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