## Systems - Word Problems

1) Kathryn and Eduardo each improved their yards by planting rose bushes and ivy. They bought their supplies from the same store. Kathryn spent $\$ 57$ on 9 rose bushes and 3 pots of ivy. Eduardo spent $\$ 86$ on 10 rose bushes and 9 pots of ivy. What is the cost of one rose bush and the cost of one pot of ivy?
2) Sarawong and Julio are selling pies for a school fundraiser. Customers can buy apple pies and pumpkin pies. Sarawong sold 4 apple pies and 12 pumpkin pies for a total of $\$ 204$. Julio sold 11 apple pies and 6 pumpkin pies for a total of $\$ 183$. Find the cost each of one apple pie and one pumpkin pie.
3) The senior classes at High School A and High School B planned separate trips to the county fair. The senior class at High School A rented and filled 6 vans and 5 buses with 256 students. High School B rented and filled 1 van and 10 buses with 446 students. Every van had the same number of students in it as did the buses. How many students can a van carry? How many students can a bus carry?
4) Brenda's school is selling tickets to a spring musical. On the first day of ticket sales the school sold 12 senior citizen tickets and 3 child tickets for a total of $\$ 195$. The school took in $\$ 195$ on the second day by selling 3 senior citizen tickets and 12 child tickets. What is the price each of one senior citizen ticket and one child ticket?
5) Jacob and Castel are selling fruit for a school fundraiser. Customers can buy small boxes of oranges and large boxes of oranges. Jacob sold 9 small boxes of oranges and 1 large box of oranges for a total of $\$ 71$. Castel sold 13 small boxes of oranges and 11 large boxes of oranges for a total of $\$ 265$. What is the cost each of one small box of oranges and one large box of oranges?
6) Kim's school is selling tickets to a choral performance. On the first day of ticket sales the school sold 4 senior citizen tickets and 1 student ticket for a total of $\$ 50$. The school took in $\$ 210$ on the second day by selling 10 senior citizen tickets and 11 student tickets. Find the price of a senior citizen ticket and the price of a student ticket.
7) The senior classes at High School A and High School B planned separate trips to New York City. The senior class at High School A rented and filled 6 vans and 8 buses with 288 students. High School B rented and filled 12 vans and 11 buses with 456 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.
8) The school that Micaela goes to is selling tickets to a spring musical. On the first day of ticket sales the school sold 1 senior citizen ticket and 3 student tickets for a total of $\$ 48$. The school took in $\$ 282$ on the second day by selling 10 senior citizen tickets and 12 student tickets. Find the price of a senior citizen ticket and the price of a student ticket.
9) Jose and Ashley are selling cheesecakes for a school fundraiser. Customers can buy pecan cheesecakes and apple cheesecakes. Jose sold 8 pecan cheesecakes and 14 apple cheesecakes for a total of $\$ 272$. Ashley sold 4 pecan cheesecakes and 13 apple cheesecakes for a total of $\$ 232$. Find the cost each of one pecan cheesecake and one apple cheesecake.
10) Jennifer and Stephanie are selling pies for a school fundraiser. Customers can buy blueberry pies and pumpkin pies. Jennifer sold 7 blueberry pies and 5 pumpkin pies for a total of $\$ 221$. Stephanie sold 1 blueberry pie and 2 pumpkin pies for a total of $\$ 56$. What is the cost each of one blueberry pie and one pumpkin pie?
11) The indoor climbing gym is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 9 vans and 3 buses with 321 students. High School B rented and filled 14 vans and 8 buses with 676 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.
12) Matt and Joe each improved their yards by planting grass sod and geraniums. They bought their supplies from the same store. Matt spent $\$ 60$ on $5 \mathrm{ft}^{2}$ of grass sod and 5 geraniums. Joe spent $\$ 126$ on $13 \mathrm{ft}^{2}$ of grass sod and 7 geraniums. Find the cost of one $\mathrm{ft}^{2}$ of grass sod and the cost of one geranium.
13) Kristin and Danielle are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of holiday wrapping paper. Kristin sold 6 rolls of plain wrapping paper and 6 rolls of holiday wrapping paper for a total of $\$ 90$. Danielle sold 4 rolls of plain wrapping paper and 14 rolls of holiday wrapping paper for a total of $\$ 170$. What is the cost each of one roll of plain wrapping paper and one roll of holiday wrapping paper?
14) The senior classes at High School A and High School B planned separate trips to Yellowstone National Park. The senior class at High School A rented and filled 3 vans and 14 buses with 633 students. High School B rented and filled 13 vans and 8 buses with 531 students. Every van had the same number of students in it as did the buses. Find the number of students in each van and in each bus.
15) The senior classes at High School A and High School B planned separate trips to the water park. The senior class at High School A rented and filled 10 vans and 10 buses with 410 students. High School B rented and filled 4 vans and 3 buses with 139 students. Every van had the same number of students in it as did the buses. Find the number of students in each van and in each bus.
16) The school that Cody goes to is selling tickets to a spring musical. On the first day of ticket sales the school sold 12 senior citizen tickets and 10 child tickets for a total of $\$ 278$. The school took in $\$ 231$ on the second day by selling 11 senior citizen tickets and 7 child tickets. What is the price each of one senior citizen ticket and one child ticket?
17) Aliyah and Matt are selling fruit for a school fundraiser. Customers can buy small boxes of tangerines and large boxes of tangerines. Aliyah sold 7 small boxes of tangerines and 5 large boxes of tangerines for a total of $\$ 128$. Matt sold 2 small boxes of tangerines and 9 large boxes of tangerines for a total of $\$ 188$. What is the cost each of one small box of tangerines and one large box of tangerines?
18) Ndiba and Molly are selling fruit for a school fundraiser. Customers can buy small boxes of oranges and large boxes of oranges. Ndiba sold 10 small boxes of oranges and 3 large boxes of oranges for a total of $\$ 130$. Molly sold 4 small boxes of oranges and 13 large boxes of oranges for a total of $\$ 288$. What is the cost each of one small box of oranges and one large box of oranges?
19) The senior classes at High School A and High School B planned separate trips to the county fair. The senior class at High School A rented and filled 10 vans and 4 buses with 278 students. High School B rented and filled 13 vans and 9 buses with 521 students. Every van had the same number of students in it as did the buses. Find the number of students in each van and in each bus.
20) The school that Stephanie goes to is selling tickets to the annual dance competition. On the first day of ticket sales the school sold 9 adult tickets and 11 student tickets for a total of $\$ 164$. The school took in $\$ 208$ on the second day by selling 13 adult tickets and 13 student tickets. What is the price each of one adult ticket and one student ticket?
21) The school that Daniel goes to is selling tickets to the annual talent show. On the first day of ticket sales the school sold 12 adult tickets and 2 student tickets for a total of $\$ 180$. The school took in $\$ 82$ on the second day by selling 2 adult tickets and 9 student tickets. What is the price each of one adult ticket and one student ticket?
22) Lisa and Amy each improved their yards by planting grass sod and geraniums. They bought their supplies from the same store. Lisa spent $\$ 35$ on $7 \mathrm{ft}^{2}$ of grass sod and 2 geraniums. Amy spent $\$ 104$ on $9 \mathrm{ft}^{2}$ of grass sod and 11 geraniums. What is the cost of one $\mathrm{ft}^{2}$ of grass sod and the cost of one geranium?
23) Willie and Eduardo are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of holiday wrapping paper. Willie sold 12 rolls of plain wrapping paper and 12 rolls of holiday wrapping paper for a total of $\$ 240$. Eduardo sold 9 rolls of plain wrapping paper and 14 rolls of holiday wrapping paper for a total of $\$ 250$. Find the cost each of one roll of plain wrapping paper and one roll of holiday wrapping paper.
24) The senior classes at High School A and High School B planned separate trips to New York City. The senior class at High School A rented and filled 4 vans and 8 buses with 360 students. High School B rented and filled 13 vans and 3 buses with 204 students. Each van and each bus carried the same number of students. How many students can a van carry? How many students can a bus carry?
25) New York City is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 4 vans and 4 buses with 160 students. High School B rented and filled 8 vans and 1 bus with 152 students. Each van and each bus carried the same number of students. How many students can a van carry? How many students can a bus carry?
26) The state fair is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 1 van and 13 buses with 348 students. High School B rented and filled 1 van and 10 buses with 270 students. Each van and each bus carried the same number of students. How many students can a van carry? How many students can a bus carry?
27) Pranav and Molly are selling wrapping paper for a school fundraiser. Customers can buy rolls of plain wrapping paper and rolls of holiday wrapping paper. Pranav sold 5 rolls of plain wrapping paper and 10 rolls of holiday wrapping paper for a total of $\$ 250$. Molly sold 7 rolls of plain wrapping paper and 11 rolls of holiday wrapping paper for a total of $\$ 293$. What is the cost each of one roll of plain wrapping paper and one roll of holiday wrapping paper?
28) The indoor climbing gym is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 8 vans and 11 buses with 564 students. High School B rented and filled 3 vans and 12 buses with 558 students. Each van and each bus carried the same number of students. Find the number of students in each van and in each bus.
29) The senior classes at High School A and High School B planned separate trips to New York City. The senior class at High School A rented and filled 7 vans and 12 buses with 721 students. High School B rented and filled 4 vans and 13 buses with 756 students. Each van and each bus carried the same number of students. How many students can a van carry? How many students can a bus carry?
30) Yellowstone National Park is a popular field trip destination. This year the senior class at High School A and the senior class at High School B both planned trips there. The senior class at High School A rented and filled 12 vans and 7 buses with 343 students. High School B rented and filled 6 vans and 5 buses with 227 students. Every van had the same number of students in it as did the buses. How many students can a van carry? How many students can a bus carry?

## Answers to Systems - Word Problems (ID: 1)

1) rose bush: $\$ 5$, pot of ivy: $\$ 4 \quad$ 2) apple pie: $\$ 9$, pumpkin pie: $\$ 14$ 3) Van: 6, Bus: 44
2) senior citizen ticket: $\$ 13$, child ticket: $\$ 13$
3) small box of oranges: $\$ 6$, large box of oranges: $\$ 17$
4) senior citizen ticket: $\$ 10$, student ticket: $\$ 10$
5) Van: 16, Bus: 24
6) senior citizen ticket: $\$ 15$, student ticket: $\$ 11$
7) pecan cheesecake: \$6, apple cheesecake: $\$ 16$
8) blueberry pie: $\$ 18$, pumpkin pie: $\$ 19$
9) Van: 18, Bus: 53
10) $\mathrm{ft}^{2}$ of grass sod: $\$ 7$, geranium: $\$ 5$
11) roll of plain wrapping paper: $\$ 4$, roll of holiday wrapping paper: $\$ 11$
12) Van: 15, Bus: 42 15) Van: 16, Bus: 25 16) senior citizen ticket: $\$ 14$, child ticket: $\$ 11$
13) small box of tangerines: \$4, large box of tangerines: $\$ 20$
14) small box of oranges: $\$ 7$, large box of oranges: $\$ 20$ 19) Van: 11, Bus: 42
15) adult ticket: $\$ 6$, student ticket: $\$ 10$
16) adult ticket: \$14, student ticket: \$6
17) $\mathrm{ft}^{2}$ of grass sod: $\$ 3$, geranium: $\$ 7$
18) roll of plain wrapping paper: $\$ 6$, roll of holiday wrapping paper: $\$ 14$
19) Van: 6, Bus: 42 25) Van: 16, Bus: 24 26) Van: 10, Bus: 26
20) roll of plain wrapping paper: $\$ 12$, roll of holiday wrapping paper: $\$ 19$
21) Van: 10, Bus: 44 29) Van: 7, Bus: 56 30) Van: 7, Bus: 37
