1. Recommending items based on global popularity can (*check all that apply*): 1 point

- [ ] provide personalization
- [ ] capture context (e.g., time of day)
- [x] none of the above

2. Recommending items using a classification approach can (*check all that apply*): 1 point

- [x] provide personalization
- [x] capture context (e.g., time of day)
- [ ] none of the above

3. Recommending items using a simple count based co-occurrence matrix can (*check all that apply*): 1 point

- [x] provide personalization
- [ ] capture context (e.g., time of day)
- [ ] none of the above

4. Recommending items using featurized matrix factorization can (*check all that apply*): 1 point

- [x] provide personalization
- [x] capture context (e.g., time of day)
- [ ] none of the above

5. Normalizing co-occurrence matrices is used primarily to account for: 1 point

- ( ) people who purchased many items
- (•) items purchased by many people
- ( ) eliminating rare products
- ( ) none of the above

6. A store has 3 customers and 3 products. Below are the learned feature vectors for each user and product. Based on this estimated model, which product would you recommend most highly to *User #2*? 1 point

User ID	Feature vector

1	(1.73, 0.01, 5.22)
2	(0.03, 4.41, 2.05)
3	(1.13, 0.89, 3.76)

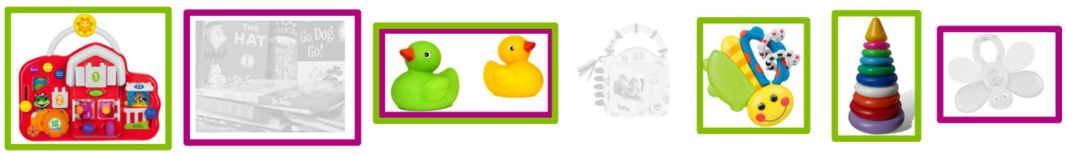
Product ID	Feature vector
1	(3.29, 3.44, 3.67)
2	(0.82, 9.71, 3.88)
3	(8.34, 1.72, 0.02)

- ○ Product #1
- ◉ Product #2
- ○ Product #3

7. For the liked and recommended items displayed below, calculate the recall and round to 2 decimal points. (*As in the lesson, green squares indicate recommended items, magenta squares are liked items. Items not recommended are grayed out for clarity.*) Note: enter your answer in American decimal format (e.g. enter 0.98, not 0,98) 1 point

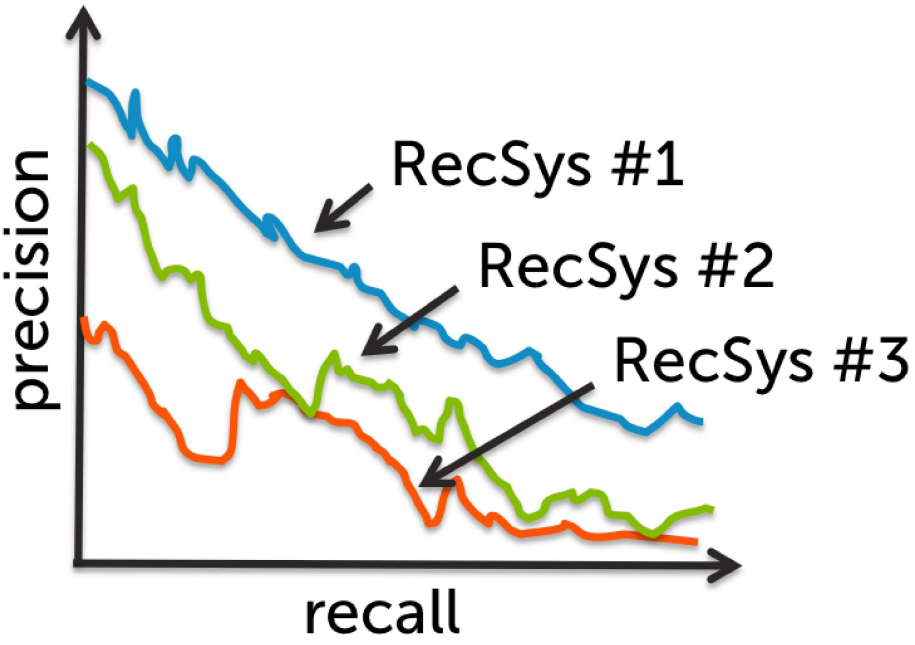
0.33

8. For the liked and recommended items displayed below, calculate the precision and round to 2 decimal points. (*As in the lesson, green squares indicate recommended items, magenta squares are liked items. Items not recommended are grayed out for clarity.*) Note: enter your answer in American decimal format (e.g. enter 0.98, not 0,98) 1 point



0.25

9. Based on the precision-recall curves in the figure below, which recommender would you use? 1 point



- (●) RecSys #1
- ( ) RecSys #2
- ( ) RecSys #3