

Question Pools

Example: Robbery 101, Quiz 1, 4 Learning Goals

Learning Goal 1: Knowing the Getaway Car Question Bank ₁	Learning Goal 2: Knowing the Vault Question Bank ₂
(b ₁₁) What color is the car? (b ₁₂) What is the model of the car? (b ₁₃) Where is the car parked?	(b ₂₁) Where is the vault located? (b ₂₁) Who has the key to the vault? (b ₂₃) When is vault unattended?
Learning Goal 3: Knowing the Guards Question Bank ₃	Learning Goal 4: Knowing the Schedule Question Bank ₄
(b ₃₁) How many total guards are there? (b ₃₂) Which guard is distracted a lot? (b ₃₃) Which guard is nice?	(b ₄₁) When are you entering the bank? (b ₄₁) When is the time for stockings? (b ₄₃) When is the driver going to floor it?

A student quiz may look like this:

Quiz 1, Robbery 101

Please follow all codes of academic integrity.

Name: _____ Date: _____

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|--------------------------------|--|
| 1. Where is the car parked? | 3. Which guard is distracted a lot? |
| 2. Where is the vault located? | 4. When is the driver going to floor it? |

What to consider:

- Are you creating the pools on your LMS so the LMS assign the assessments?
- What is the number students taking the assessment?
- How many questions are there in each student's assessment?
- Can you make a pool of question on the learning goals with appropriate level difficulty?

Table when the maximum number of questions in common is 1

# of Students in class	#of Questions in Assessment	# of Questions in Each Pool
$N \leq 9$	$s \leq 4$	3
$N \leq 16$	$s \leq 5$	4
$N \leq 25$	$s \leq 6$	5
$N \leq 49$	$s \leq 8$	7
$N \leq 64$	$s \leq 9$	8
$N \leq 91$	$s \leq 10$	9
$N \leq 121$	$s \leq 12$	11
$N \leq 169$	$s \leq 14$	13
$N \leq 256$	$s \leq 17$	16
$N \leq 289$	$s \leq 18$	17
$N \leq 361$	$s \leq 20$	19
$N \leq 529$	$s \leq 24$	23
$N \leq 625$	$s \leq 26$	25
$N \leq 729$	$s \leq 28$	27
$N \leq 841$	$s \leq 30$	29
$N \leq 961$	$s \leq 32$	31
$N \leq 1024$	$s \leq 33$	32
$N \leq 1369$	$s \leq 38$	37

Table when the maximum number of questions in common is 2

# of Students in class	#of Questions in Assessment	# of Questions in Each Pool
$N \leq 27$	$s \leq 4$	3
$N \leq 64$	$s \leq 5$	4
$N \leq 125$	$s \leq 6$	5
$N \leq 243$	$s \leq 8$	7
$N \leq 512$	$s \leq 9$	8
$N \leq 729$	$s \leq 10$	9
$N \leq 1331$	$s \leq 12$	11