Mathematics

Supplemental Aids Allowed on TAKS (Accommodated) and TAKS–M

pages 93-94 of the *2010–2011 Accommodations Manual*

Disclaimer

These slides have been prepared and approved by the Student Assessment Division of the Texas Education Agency.

If any slide is amended or revised for use in local or regional trainings, please remove the TEA footer at the bottom of the slide.

- The following examples of supplemental aids that are marked with the ✓ symbol are allowed for use by eligible students on TAKS (Accommodated) and TAKS–M. These supplemental aids **do not** require TEA review because they are considered a tool and not a source of direct answers.

- However, it is the responsibility of district/campus personnel to ensure that the supplemental aids are:
  - ✓grade-appropriate,
  - ✓factual,
  - ✓error-free,
  - ✓concise, and
  - ✓well-organized.

- Examples of supplemental aids marked with the ✗ symbol are not allowed on state assessments without review, or must be edited to follow the guidelines listed in Appendix D.

Dictionary (p. 93 #1)

A standard English dictionary (or Spanish dictionary if a Spanish test is administered) that is grade- or ability-appropriate may be used. An Accommodation Request Form is not required.

If the dictionary does not follow the above guideline, submit an ARF for use on TAKS (Accommodated), or review it locally for use on TAKS–M.

Dictionary (p. 93 #1)

Glossaries, including those made by teachers or students, that contain definitions of subject-specific vocabulary are not allowed.

Glossary

Coefficient – the numerical factor in a term
Constants – monomials that are real numbers
Dependent – a system of equations that has an infinite number of solutions
Domain – the set of all first coordinates from the ordered pairs in a relation
Origin – the point of intersection of the two axes in the coordinate plane
Monomial – a number, a variable, or a product of a number and a variable
Parabola – the general shape of the graph of a quadratic function
Polynomial – a monomial or a sum of monomials
Ratio – a comparison of two numbers by division
Reciprocal – the multiplicative inverse of a number

An individual definition of a vocabulary word requires an ARF for use on TAKS (Accommodated), or local review for use on TAKS–M.

Mnemonic Devices (p. 93 #2)

A mnemonic device is a technique that assists with memory. Mnemonic devices that are acronyms and/or phrases may be used to help a student recall information. An Accommodation Request Form is not required.

PEMDAS

and/or

Please **E**xcuse **M**y **D**ear **A**unt **S**ally

DMSB

and/or

Dad **M**other **S**ister **B**rother

If the mnemonic device does not follow the above guideline, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

Mnemonic Devices (p. 93 #2)

The subject-specific words that the mnemonic represents are not allowed.

Parentheses
Exponents
Multiplication
Division
Addition
Subtraction

Divide
Multiply
Subtract
Bring down

If the mnemonic device contains the subject-specific words that the mnemonic represents, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

Addition Charts (p. 93 #3)

Addition charts may be used. An Accommodation Request Form is not required. The addition chart must be a grid used to find answers, not a list of addition facts. Each axis may be numbered up to 9, but no higher than 9. Highlighting or any other indication of special numbers (e.g., even numbers) in the body of the chart is not allowed.

+	0	1	…	9
0	0	1	…	9
1	1	2	…	10
…	…	…	…	…
9	9	10	…	18

+	0	1	…	9
0	0	1	…	9
1	1	2	…	10
…	…	…	…	…
9	10	11	…	18

1 + 1 = 2
2 + 2 = 4
3 + 3 = 6
4 + 4 = 8
5 + 5 = 10
6 + 6 = 12
7 + 7 = 14
8 + 8 = 16
9 + 9 = 18
10 + 10 = 20

If the chart contains any of the restrictions indicated above, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

Multiplication Charts (p. 93 #4)

Multiplication charts may be used. An Accommodation Request Form is not required. The multiplication chart must be a grid used to find answers, not a list of multiplication facts. Each axis may be numbered up to 12, but no higher than 12. Highlighting or any other indication of special numbers (e.g., perfect squares) in the body of the chart is not allowed.

X	0	1	2	…	12
0	0	0	0	0	0
1	0	1	2	…	12
2	0	2	4	…	24
…	0	…	…	…	…
12	0	12	24	…	144

1 x 0 = 0	2 x 0 = 0
1 x 1 = 1	2 x 1 = 2
1 x 2 = 2	2 x 2 = 4
1 x 3 = 3	2 x 3 = 6
1 x 4 = 4	2 x 4 = 8
1 x 5 = 5	2 x 5 = 10
1 x 6 = 6	2 x 6 = 12
1 x 7 = 7	2 x 7 = 14
1 x 8 = 8	2 x 8 = 16
1 x 9 = 9	2 x 9 = 18

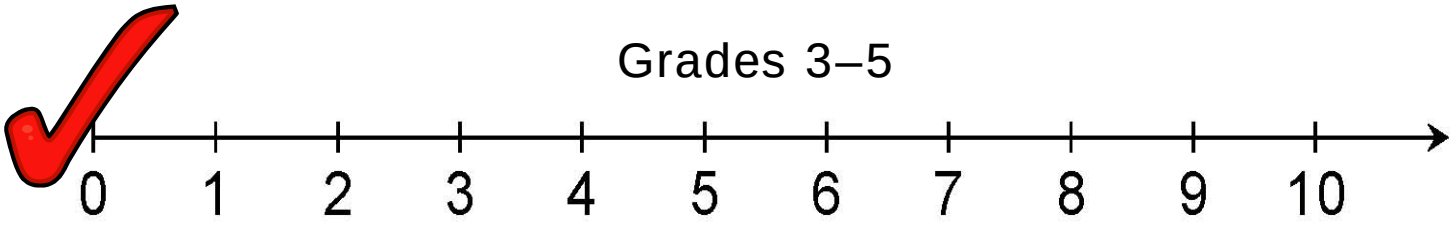
	0	1	2	…	20
0	0	0	0	0	0
1	0	1	2	…	20
2	0	2	4	…	40
…	0	…	…	…	…
20	0	20	40	…	400

If the chart contains any of the restrictions indicated above, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

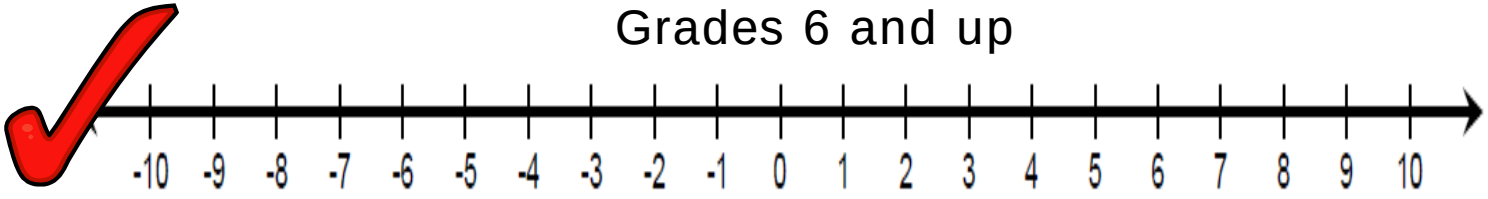
Number Lines (p. 93 #5)

Number lines labeled with the integers -10 to 10 or the whole numbers 0 to 10 may be used. An Accommodation Request Form is not required.

Grades 3–5



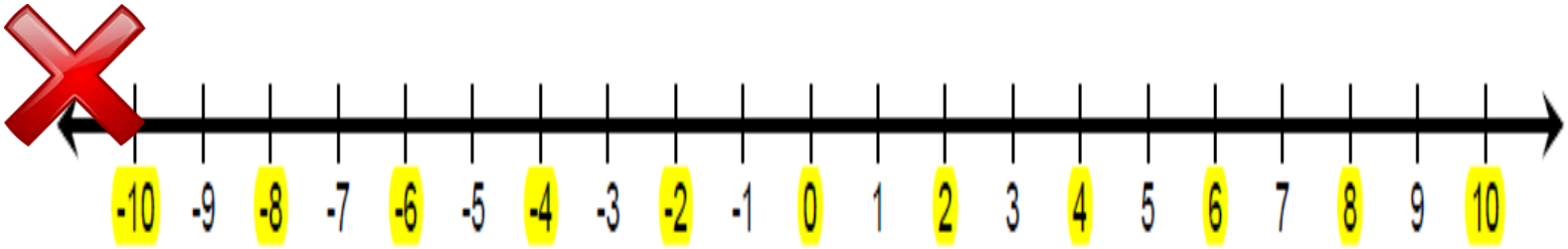
Grades 6 and up



If the number line does not follow the above guideline, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

Number Lines (p. 93 #5)

Highlighting or any other indication of number patterns is not allowed.



If the number line contains highlighting or indicates number patterns, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

100 Chart (p. 93 #6)

A 100 chart may be used. An Accommodation Request Form is not required. Highlighting or any other indication of special numbers (e.g., prime numbers) in the body of the chart is not allowed.

1	2	3	4	…	10
11	12	13	14	…	20
21	22	23	24	…	30
31	32	33	34	…	40
…	…	…	…	…	…
91	92	93	94	…	100

1	2	3	4	…	10
11	12	13	14	…	20
21	22	23	24	…	30
31	32	33	34	…	40
…	…	…	…	…	…
91	92	93	94	…	100

If the chart is highlighted or indicates special numbers, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

Number Words (p. 93 #7)

A list of words for the number 0–9 (zero, one, two, …nine) and the multiples of 10 up to 100 (ten, twenty, thirty, …one hundred) may be used. An Accommodation Request Form is not required.

0 – Zero	10 – Ten
1 – One	20 – Twenty
2 – Two	30 – Thirty
3 – Three	40 – Forty
4 – Four	50 – Fifty
5 – Five	60 – Sixty
6 – Six	70 – Seventy
7 – Seven	80 – Eighty
8 – Eight	90 – Ninety
9 – Nine	100 – One hundred

If the list of number words does not follow the above guideline, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

Place Value Chart (p. 94 #8)

A place value chart may be used. An Accommodation Request Form is not required. Place value labels and a decimal point are allowed if they are grade appropriate.

ten thousands	thousands	hundreds	tens	units	.	tenths	hundredths	thousandths

ten thousands	thousands	hundreds	tens	units	.	tenths	hundredths	thousandths
			7	1		2	3	

71.23

If the chart contains any numbers as specific examples, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

Key Words (p. 94 #9)

A list of key words for the mathematical operations (add, subtract, multiply, and divide) may be used (e.g., all together means add). An Accommodation Request Form is not required.

ADD
sum
increased by
more than
combined
total
etc.

If the list of key words does not follow the above guideline, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

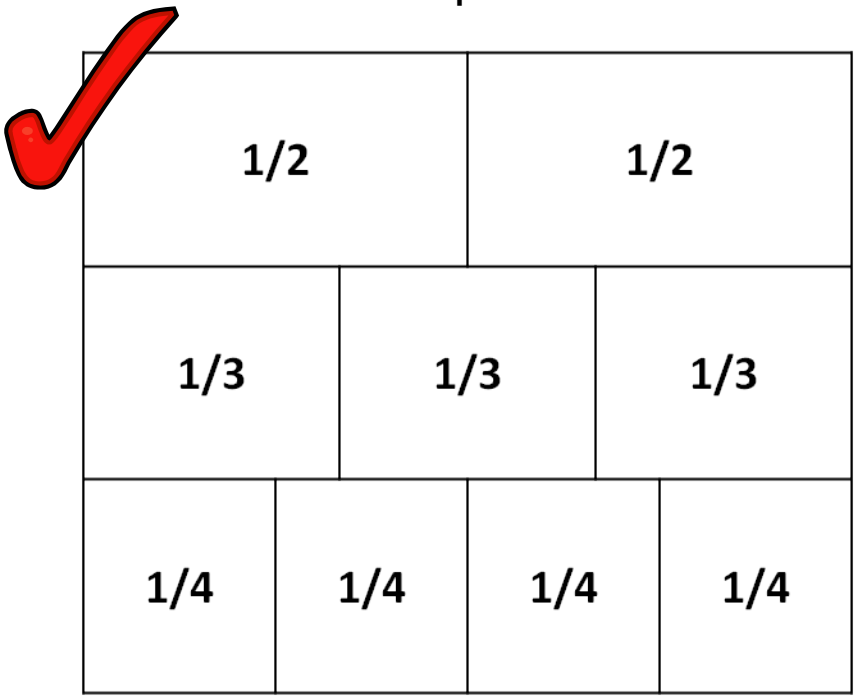
Pictorial Models (p. 94 #10)

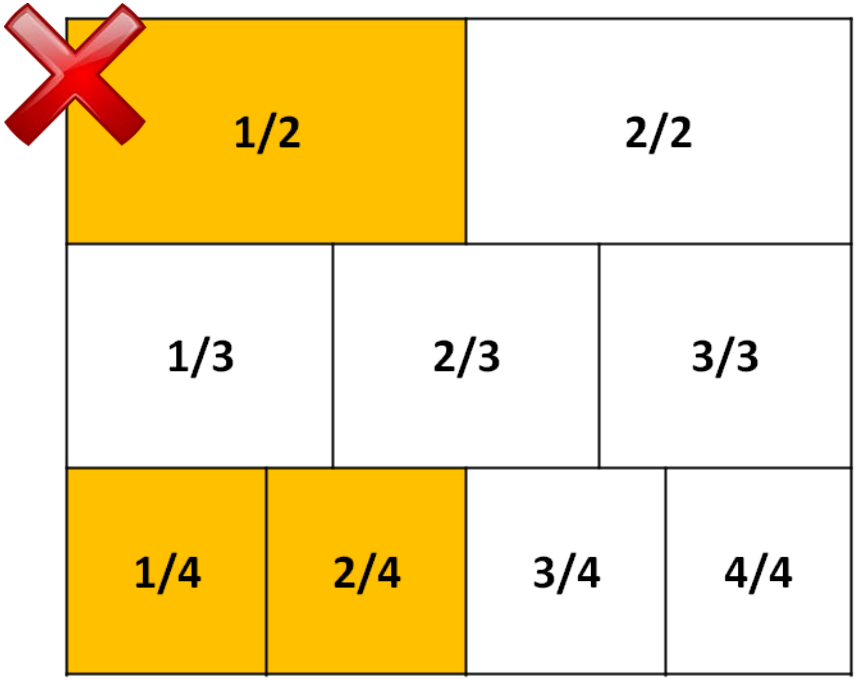
Pictorial models of the following may be used: real or play money, clocks, base-ten blocks, various types of counters, and algebra tiles. An Accommodation Request form is not required.

If the pictorial model displays any items other than those listed above, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

Pictorial Models (p. 94 #11)

Pictorial models of fraction bars or fraction circles may be used. An Accommodation Request Form is not required.

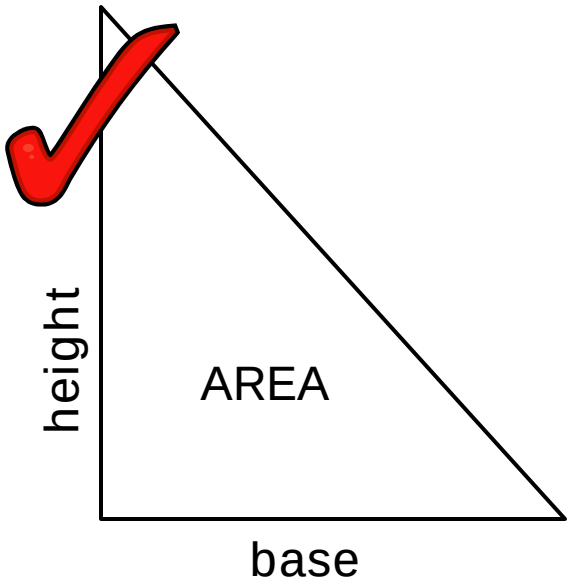


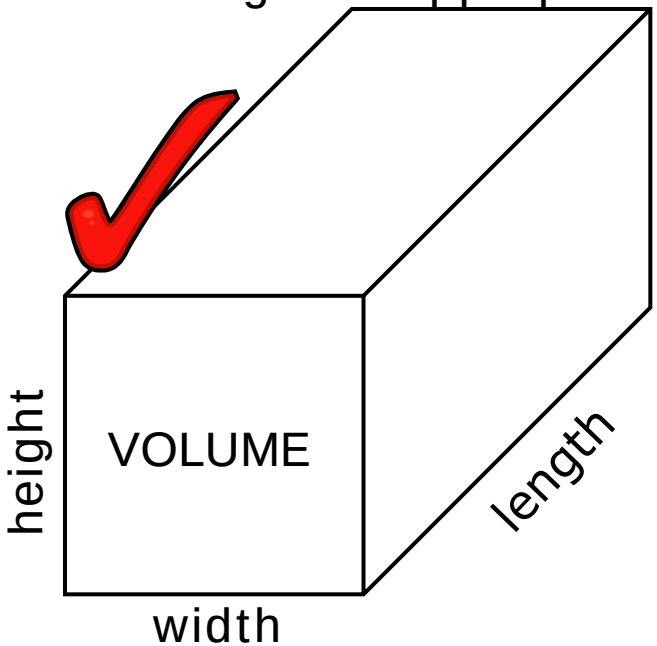


If the pictorial model indicates equivalencies, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

Pictorial Models (p. 94 #12)

Pictorial models of two- and three-dimensional figures may be used. An Accommodation Request Form is not required. A figure may be labeled only with variables or words that appear on the grade-appropriate mathematics chart provided by TEA.

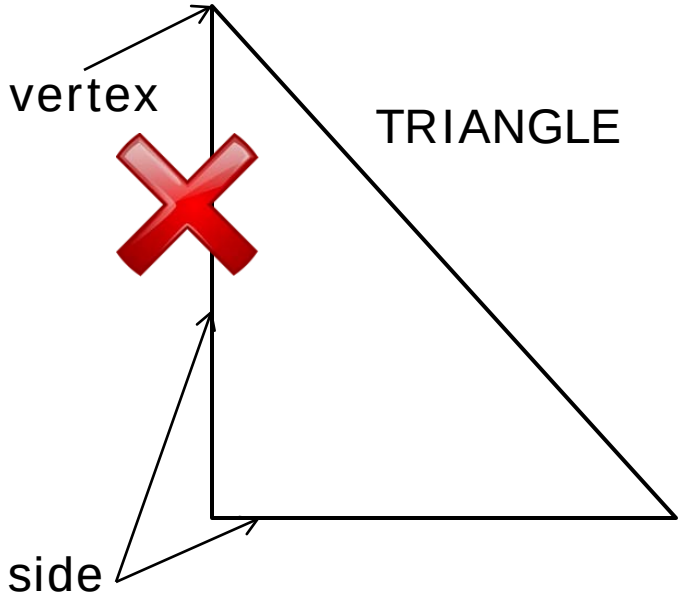


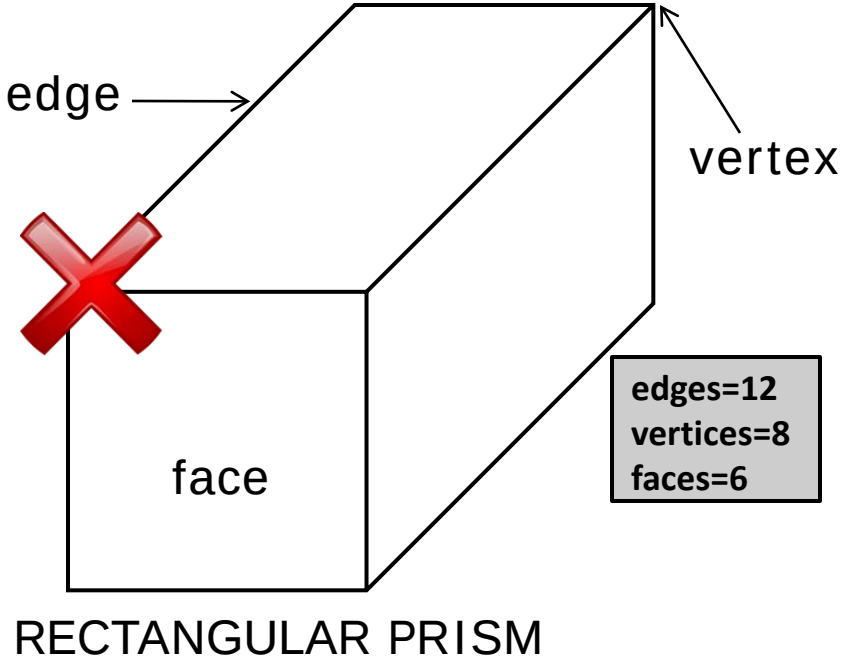


If the pictorial model is labeled with terms that do not appear on the grade-appropriate mathematics chart provided by TEA, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

Pictorial Models (p. 94 #12)

A figure may not be labeled with its name or attributes (e.g., cube, vertex, face).

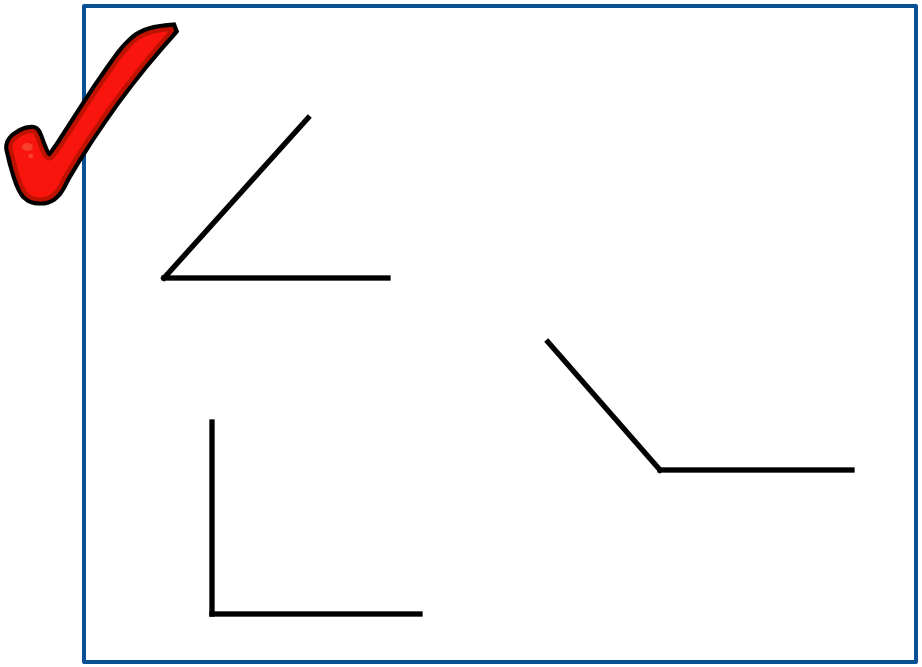




If the pictorial model is labeled with its name or attributes, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

Pictorial Models (p. 94 #13)

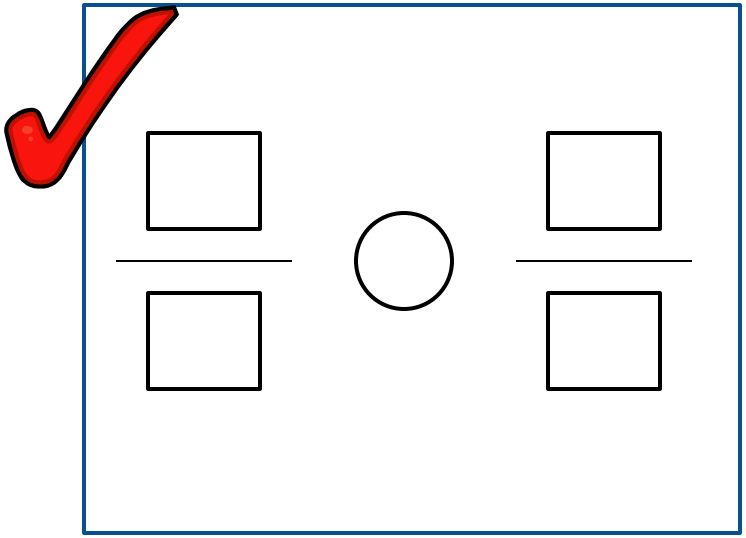
Pictorial models and graphics may be used if they do not contain titles, words, labels, acronyms, numbers, or symbols. An Accommodation Request Form is not required.

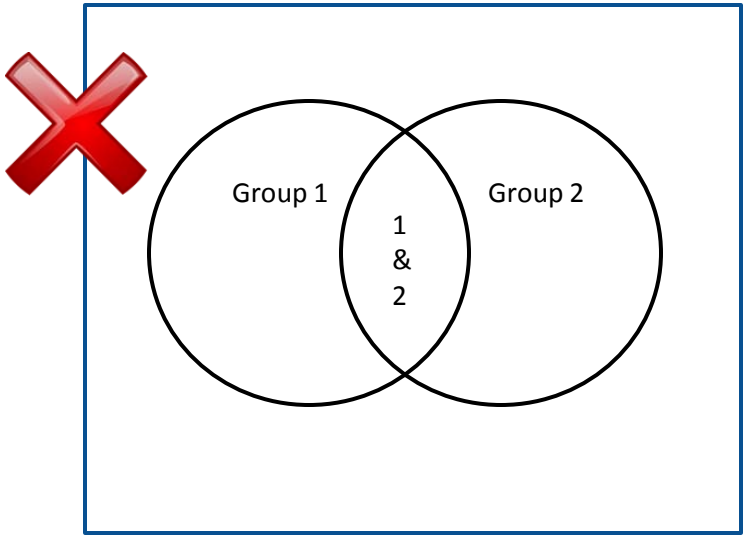


If the pictorial model contains any of the restrictions indicated above, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

Blank Graphic Organizers (p.94 #14)

Blank graphic organizers may be used. This means that the graphic organizer may not contain titles, words, labels, pictures, acronyms, numbers, or symbols. An Accommodation Request Form is not required.





If the graphic organizer is not blank, submit an ARF for use on TAKS (Accommodated), review it locally for use on TAKS–M, or you may consider editing the supplemental aid to meet Appendix D guidelines.

Thank you for reviewing the “Mathematics Supplemental Aids Allowed on TAKS (Accommodated) and TAKS-Modified” slide show presentation. Please share the contents of this presentation with educators at the campus and classroom level. It is the intent of TEA’s Student Assessment Division that all resources created for the purpose of clarification or facilitation of testing accommodations be accessible and familiar to classroom teachers.

If you continue to have questions regarding supplemental aids, please contact your Campus/District Testing Coordinator.