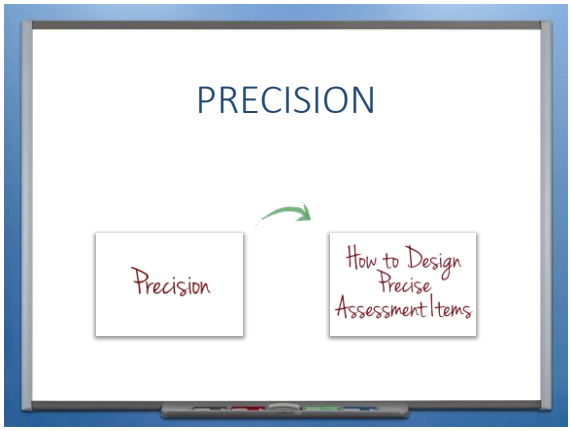
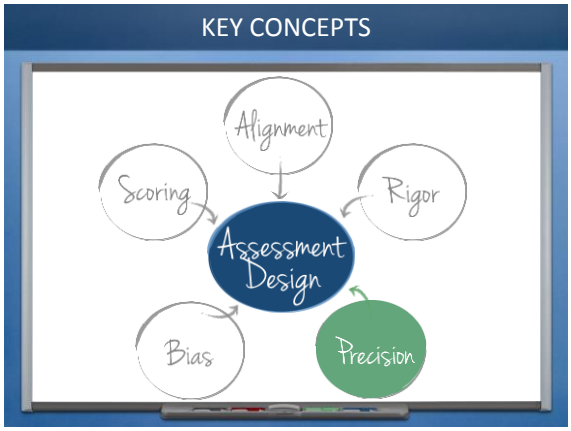
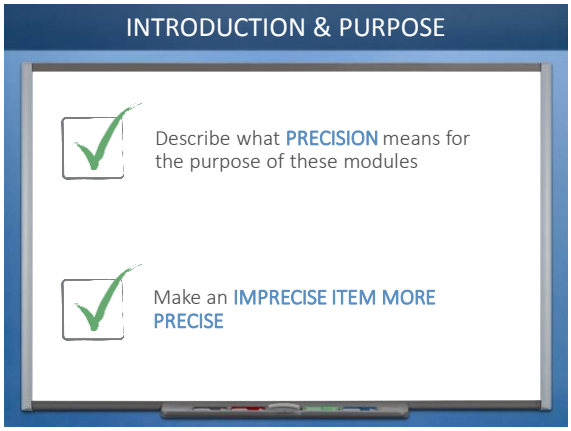
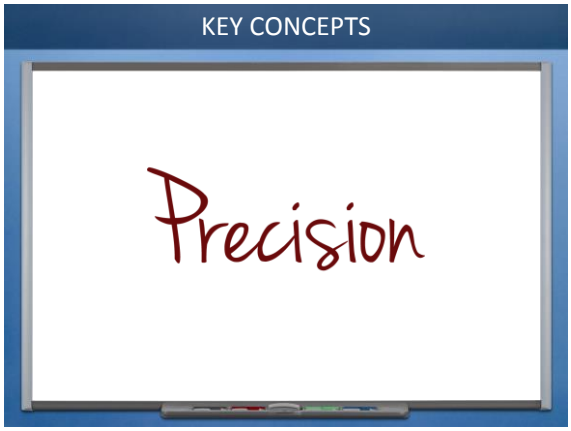
Precision

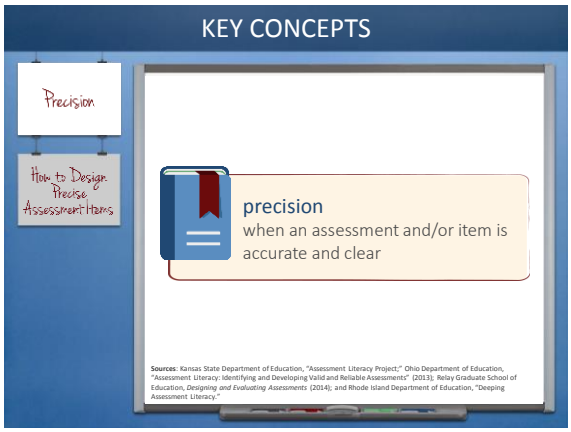

PRECISION
Precision
How to Design Precise Assessment Items

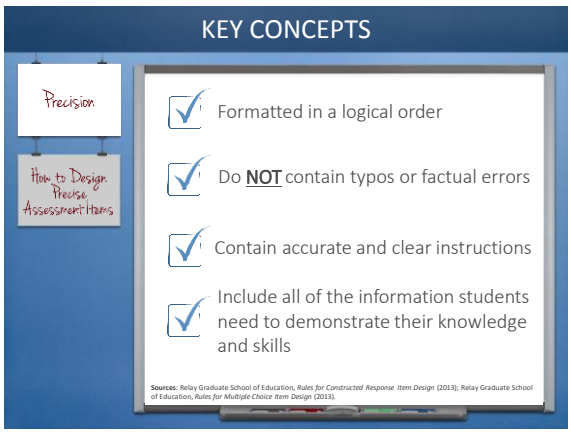

KEY CONCEPTS
Alignment
Scoring
Rigor
Assessment Design
Bias
Precision


INTRODUCTION & PURPOSE
Describe what PRECISION means for the purpose of these modules
Make an IMPRECISE ITEM MORE PRECISE

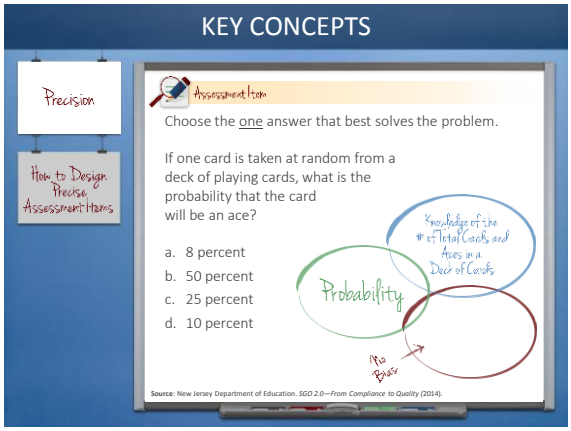
Precision

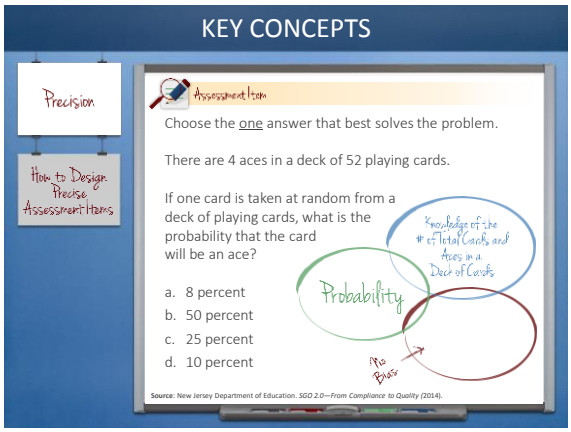

KEY CONCEPTS
Precision

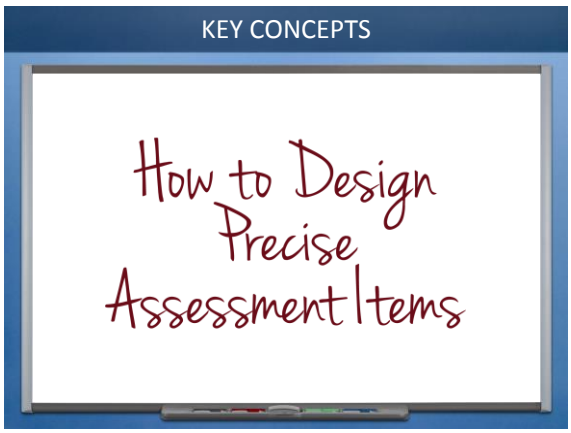

KEY CONCEPTS
Precision
How to Design Precise Assessment Items
precision
when an assessment and/or item is accurate and clear
Sources: Kansas State Department of Education, "Assessment Literacy Project;" Ohio Department of Education, "Assessment Literacy: Identifying and Developing Valid and Reliable Assessments" (2013); Relay Graduate School of Education, Designing and Evaluating Assessments (2014); and Rhode Island Department of Education, "Deeping Assessment Literacy."


KEY CONCEPTS
Precision
How to Design Precise Assessment Items
Formatted in a logical order
Do NOT contain typos or factual errors
Contain accurate and clear instructions
Include all of the information students need to demonstrate their knowledge and skills
Sources: Relay Graduate School of Education, Rules for Constructed Response Item Design (2013); Relay Graduate School of Education, Rules for Multiple Choice Item Design (2013).

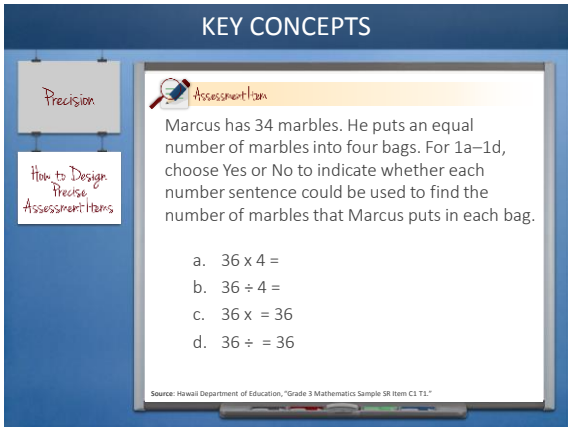
Precision

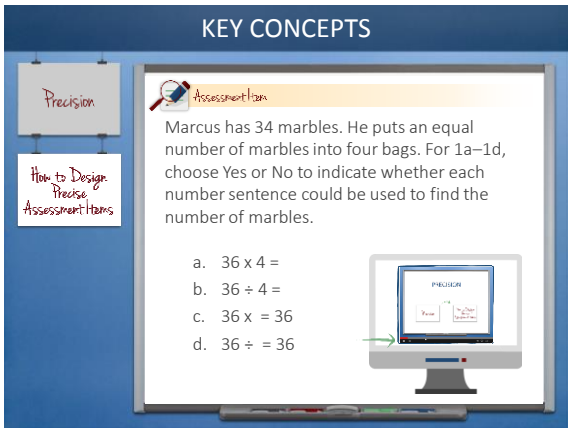

KEY CONCEPTS
Precision
How to Design Precise Assessment Items
Assessment Item
Choose the one answer that best solves the problem.
If one card is taken at random from a deck of playing cards, what is the probability that the card will be an ace?
a. 8 percent
b. 50 percent
c. 25 percent
d. 10 percent
Knowledge of the # of Total Cards and Aces in a Deck of Cards
Probability
No Bias
Source: New Jersey Department of Education. SGO 2.0—From Compliance to Quality (2014).


KEY CONCEPTS
Precision
How to Design Precise Assessment Items
Assessment Item
Choose the one answer that best solves the problem.
There are 4 aces in a deck of 52 playing cards.
If one card is taken at random from a deck of playing cards, what is the probability that the card will be an ace?
a. 8 percent
b. 50 percent
c. 25 percent
d. 10 percent
Knowledge of the # of Total Cards and Aces in a Deck of Cards
Probability
No Bias
Source: New Jersey Department of Education. SGO 2.0—From Compliance to Quality (2014).


KEY CONCEPTS
How to Design Precise Assessment Items

Precision


KEY CONCEPTS
Precision
How to Design Precise Assessment Items
Assessment Item
Marcus has 34 marbles. He puts an equal number of marbles into four bags. For 1a–1d, choose Yes or No to indicate whether each number sentence could be used to find the number of marbles that Marcus puts in each bag.
a. 36 x 4 =
b. 36 ÷ 4 =
c. 36 x = 36
d. 36 ÷ = 36
Source: Hawaii Department of Education, "Grade 3 Mathematics Sample SR Item C1 T1."


KEY CONCEPTS
Precision
How to Design Precise Assessment Items
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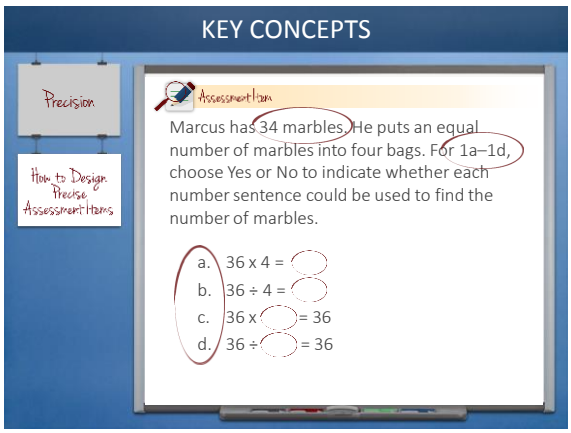
d. 36 ÷ = 36


KEY CONCEPTS
Precision
How to Design Precise Assessment Items
Assessment Item
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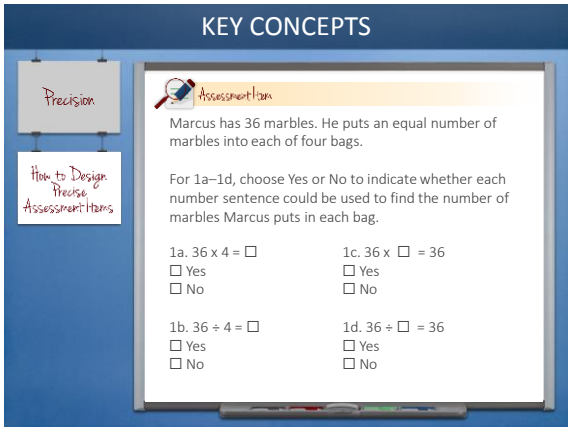
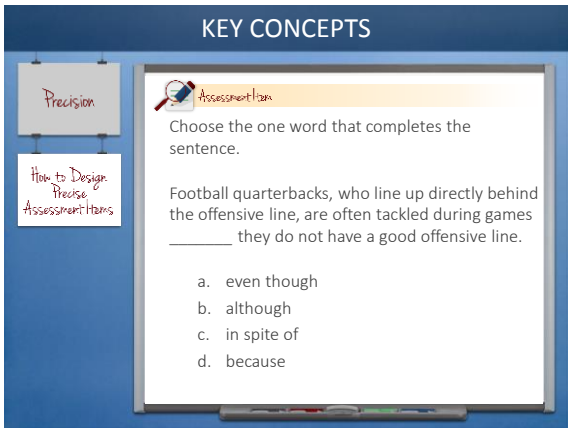
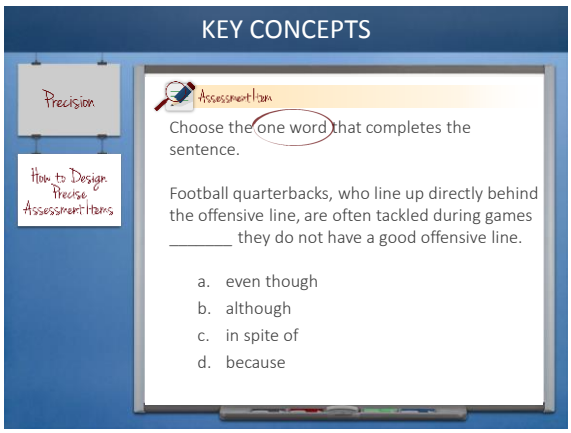
Precision


KEY CONCEPTS
Precision
How to Design Precise Assessment Items
Assessment Item
Marcus has 36 marbles. He puts an equal number of marbles into each of four bags.
For 1a–1d, choose Yes or No to indicate whether each number sentence could be used to find the number of marbles Marcus puts in each bag.
1a. 36 x 4 = ☐
☐ Yes
☐ No
1c. 36 x ☐ = 36
☐ Yes
☐ No
1b. 36 ÷ 4 = ☐
☐ Yes
☐ No
1d. 36 ÷ ☐ = 36
☐ Yes
☐ No


KEY CONCEPTS
Precision
How to Design Precise Assessment Items
Assessment Item
Choose the one word that completes the sentence.
Football quarterbacks, who line up directly behind the offensive line, are often tackled during games _____ they do not have a good offensive line.
a. even though
b. although
c. in spite of
d. because


KEY CONCEPTS
Precision
How to Design Precise Assessment Items
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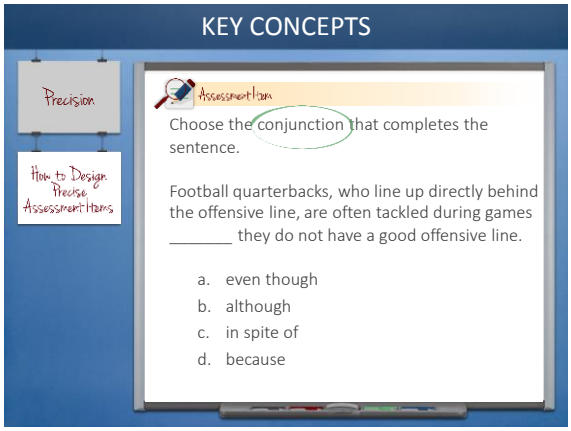
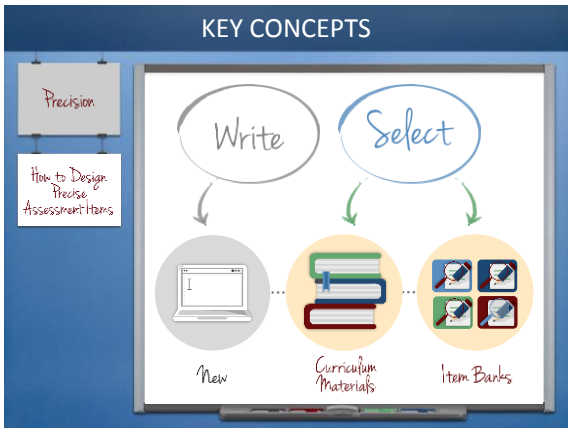
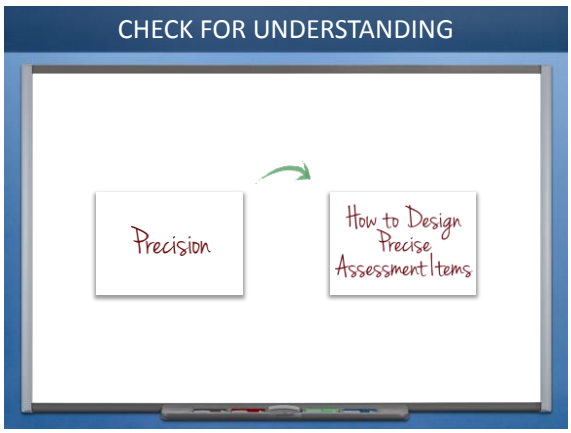
a. even though
b. although
c. in spite of
d. because

Precision


KEY CONCEPTS
Precision
How to Design Precise Assessment Items
Assessment Item
Choose the conjunction that completes the sentence.
Football quarterbacks, who line up directly behind the offensive line, are often tackled during games _____ they do not have a good offensive line.
a. even though
b. although
c. in spite of
d. because


KEY CONCEPTS
Precision
How to Design Precise Assessment Items
Write
Select
New
Curriculum Materials
Item Banks


CHECK FOR UNDERSTANDING
Precision
How to Design Precise Assessment Items

Precision

CHECK FOR UNDERSTANDING

- Describe what **PRECISION** means for the purpose of these modules
- Make an **IMPRECISE ITEM MORE PRECISE**

CHECK FOR UNDERSTANDING

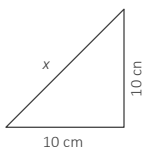
Assessment Item

CHECK FOR UNDERSTANDING

Assessment Item

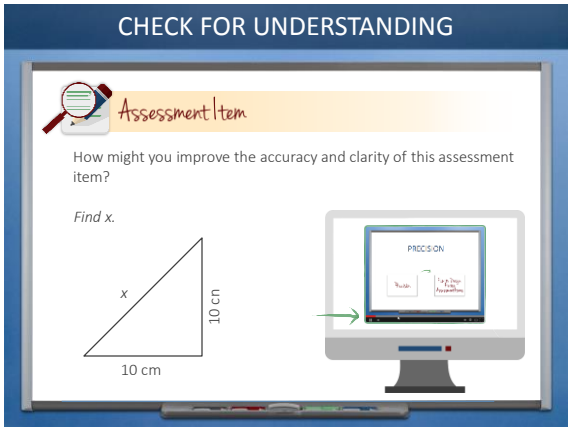
How might you improve the accuracy and clarity of this assessment item?

Find x.

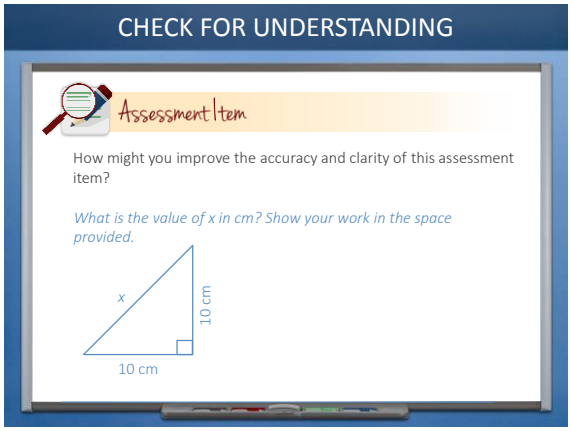


Precision

CHECK FOR UNDERSTANDING



CHECK FOR UNDERSTANDING



CONCLUSION