

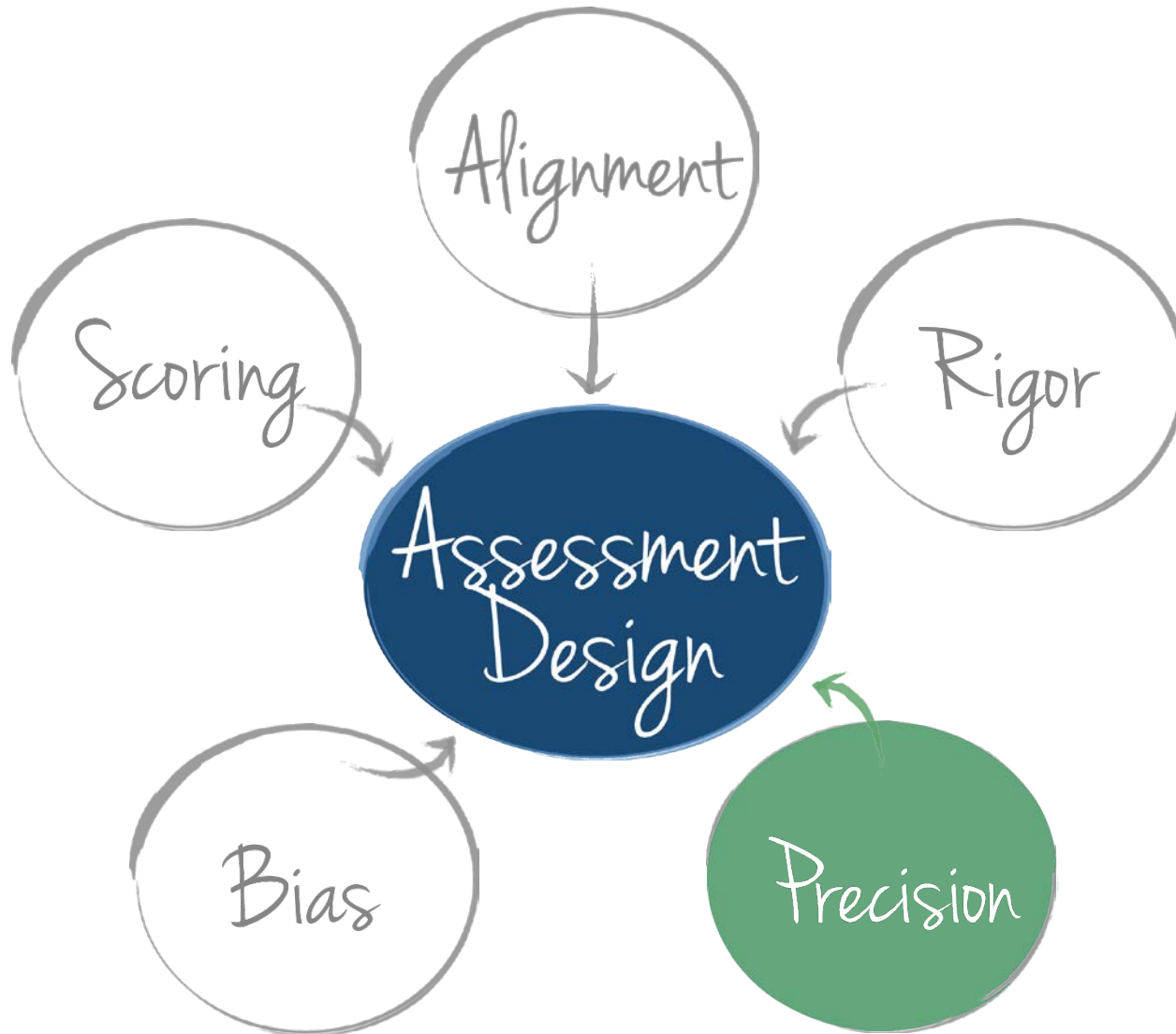
PRECISION

Precision



How to Design
Precise
Assessment Items

KEY CONCEPTS



INTRODUCTION & PURPOSE



Describe what **PRECISION** means for the purpose of these modules



Make an **IMPRECISE ITEM MORE PRECISE**

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).

KEY CONCEPTS

Precision

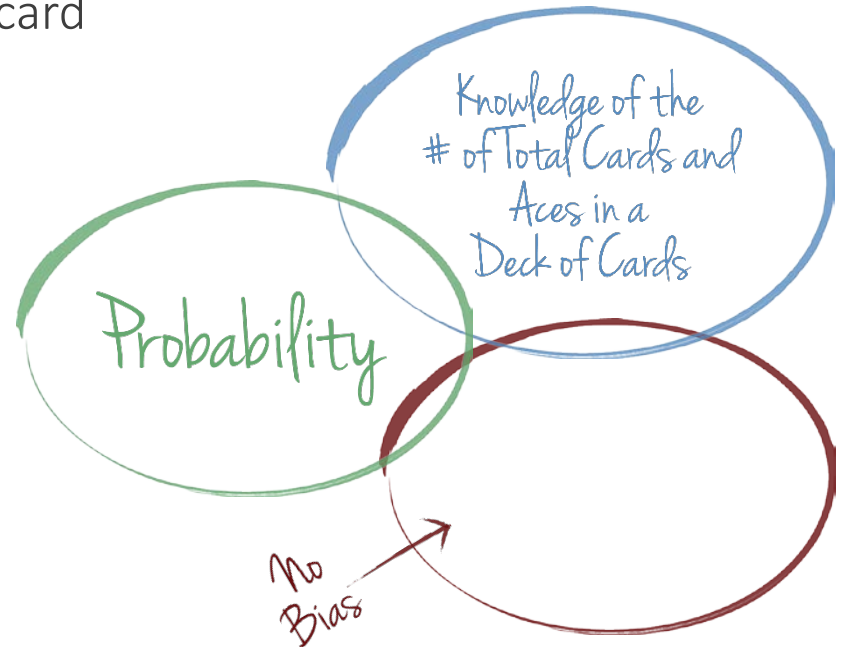


Assessment Item

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



Source: New Jersey Department of Education. SGO 2.0—From Compliance to Quality (2014).

How to Design
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KEY CONCEPTS

Precision



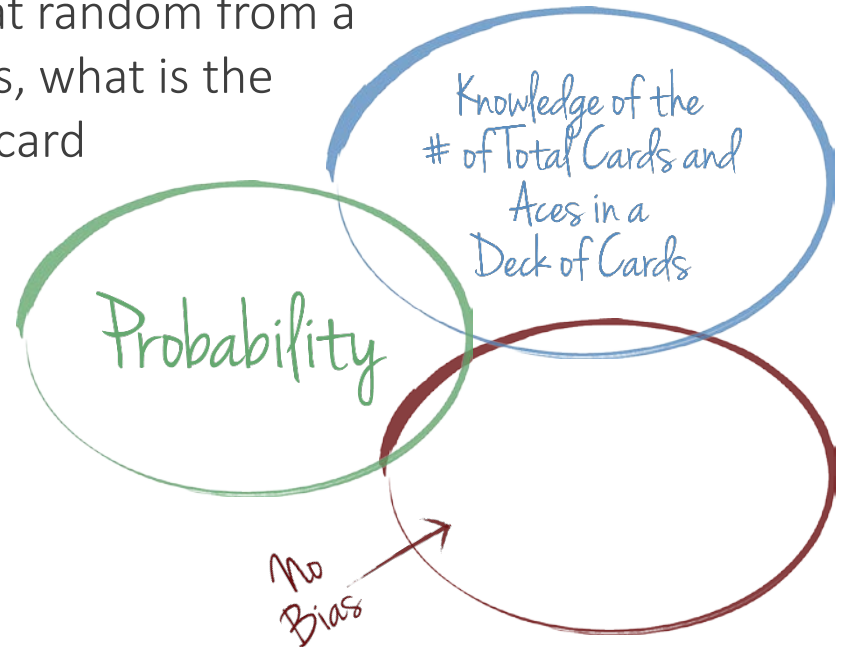
Assessment Item

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



Source: New Jersey Department of Education. SGO 2.0—From Compliance to Quality (2014).

How to Design
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Assessment Items

KEY CONCEPTS

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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. $36 \times 4 =$
- b. $36 \div 4 =$
- c. $36 \times = 36$
- d. $36 \div = 36$

KEY CONCEPTS

Precision

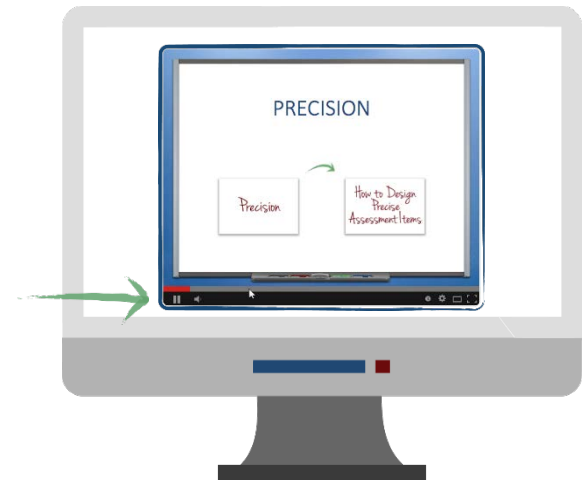
How to Design
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Assessment Items



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.

- a. $36 \times 4 =$
- b. $36 \div 4 =$
- c. $36 \times = 36$
- d. $36 \div = 36$



KEY CONCEPTS

Precision

How to Design
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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.

a. $36 \times 4 = \text{○}$

b. $36 \div 4 = \text{○}$

c. $36 \times \text{○} = 36$

d. $36 \div \text{○} = 36$

KEY CONCEPTS

Precision



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. $36 \times 4 = \square$

Yes

No

1c. $36 \times \square = 36$

Yes

No

1b. $36 \div 4 = \square$

Yes

No

1d. $36 \div \square = 36$

Yes

No

How to Design
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KEY CONCEPTS

Precision

How to Design
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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



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

How to Design
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KEY CONCEPTS

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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.

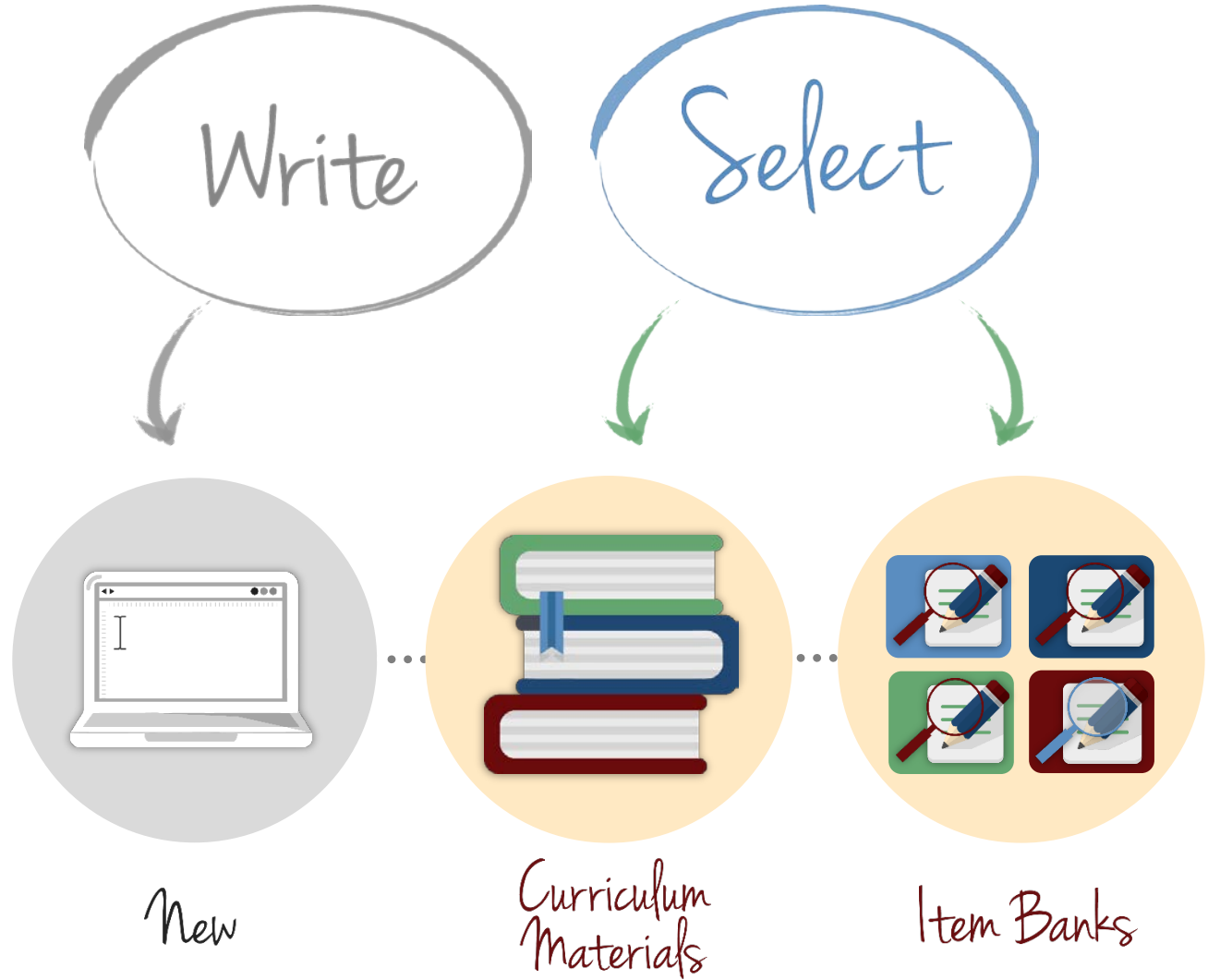
- a. even though
- b. although
- c. in spite of
- d. because

How to Design
Precise
Assessment Items

KEY CONCEPTS

Precision

How to Design
Precise
Assessment Items



CHECK FOR UNDERSTANDING

Precision



How to Design
Precise
Assessment Items

CHECK FOR UNDERSTANDING



Describe what **PRECISION** means for the purpose of these modules



Make an **IMPRECISE ITEM MORE PRECISE**

CHECK FOR UNDERSTANDING



Assessment Item

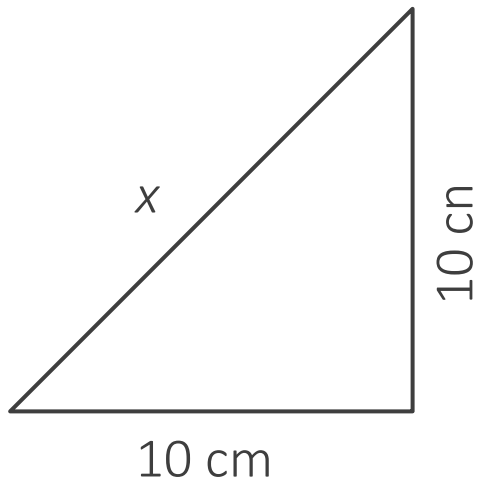
CHECK FOR UNDERSTANDING



Assessment Item

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

Find x .



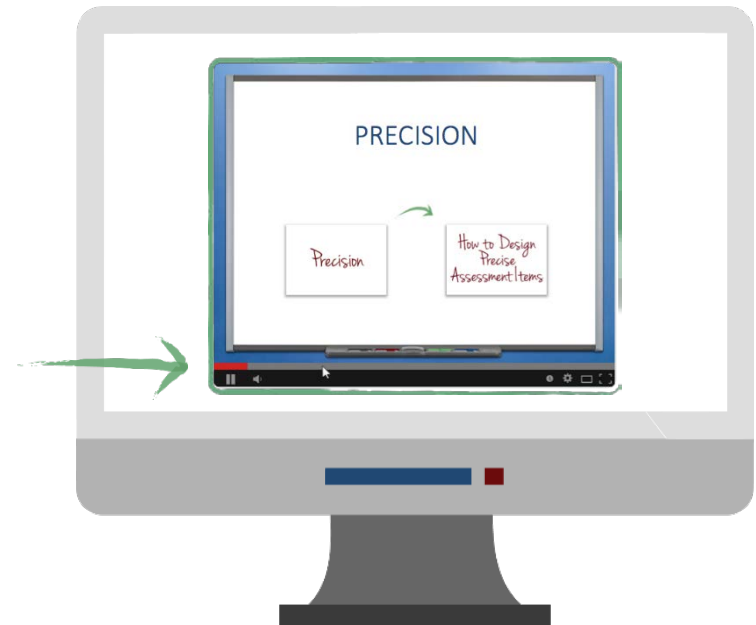
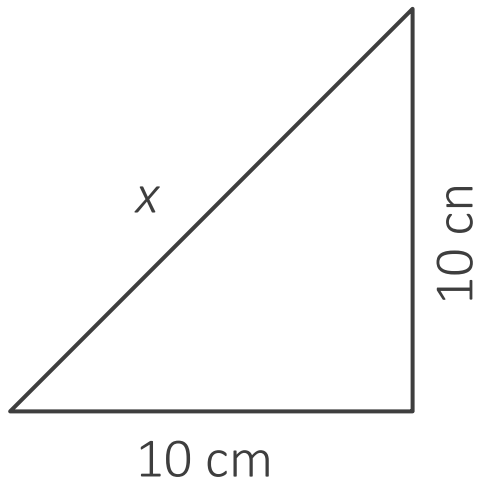
CHECK FOR UNDERSTANDING



Assessment Item

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

Find x .



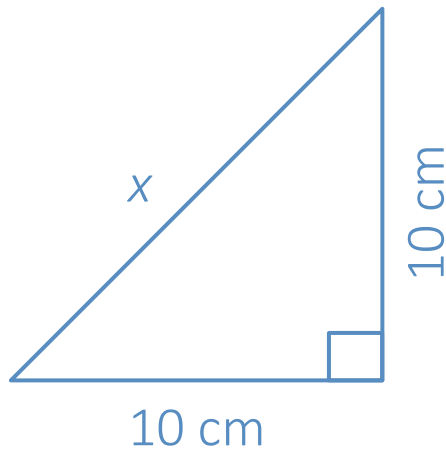
CHECK FOR UNDERSTANDING



Assessment Item

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

What is the value of x in cm? Show your work in the space provided.



CONCLUSION

PRECISION

How to Design Precise Assessment Items

A large green checkmark is drawn over the word 'PRECISION' and the text 'How to Design Precise Assessment Items'. The whiteboard also shows a small box with the word 'Precision' and a video player interface at the bottom.

