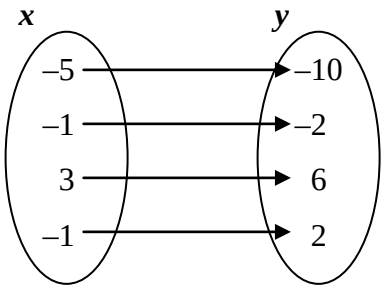
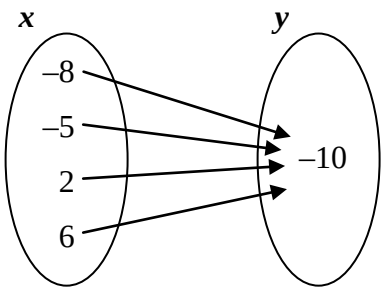
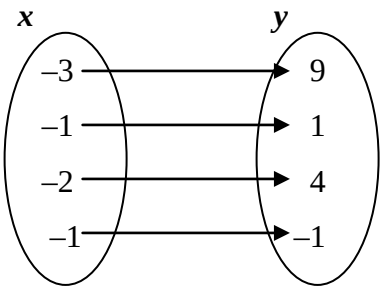
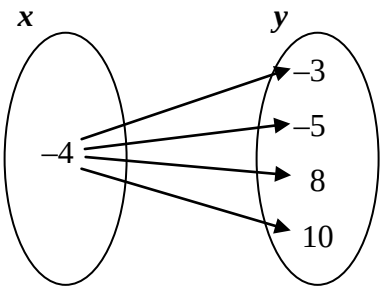
Algebra 1 Module 1 Lesson 3 – Determining if a Relationship is a Functional Relationship
Assessment Test Answers

1. Multiple choice item based on the data sets below:

Answer Choice	Correct Answer Feedback	Incorrect Answer Feedback
A {(−1, 4), (−1, −3), (0, −5), (2, −7)}	Correct! This is not a functional relationship because there are 2 y-values for 1 x value.	
B {(−2, 4), (−1, 1), (1, 1), (2, 4)}		Incorrect. This is a functional relationship since each x-value has exactly 1 y-value.
C {(−5, −5), (−4, −4), (−1, −1), (1, 1)}		Incorrect. This is a functional relationship since each x-value has exactly 1 y-value.
D {(−6, 7), (−4, 7), (0, 7), (5, 7)}		Incorrect. This is a functional relationship since each x-value has exactly 1 y-value.

2. Which of the following mappings represents a functional relationship? (Multiple choice item based on the mappings below.)

Answer Choice	Correct Answer Feedback	Incorrect Answer Feedback
A 		Incorrect. This is not a functional relationship since the *x*-value "–1" has 2 *y*-values "–2 and 2."

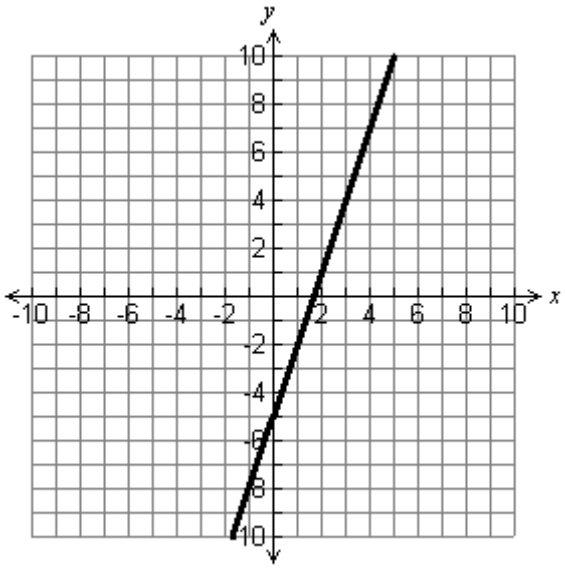
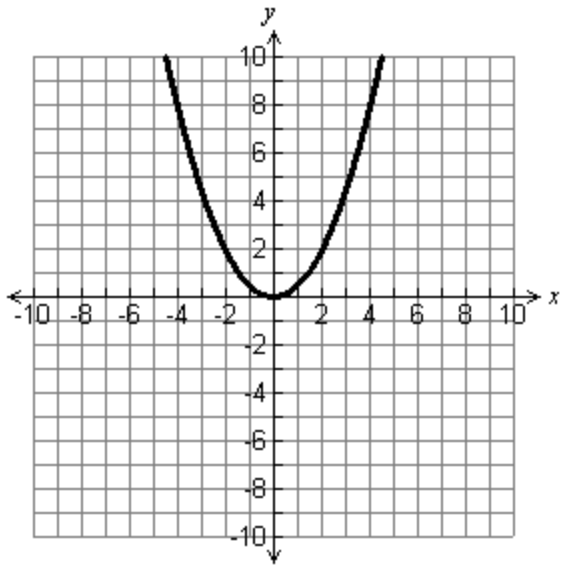
B		Correct! This is a functional relationship since there is only one x value for the y-value.	
C			Incorrect. This is not a functional relationship since the *x*-value "–1" has 2 *y*-values "1 and –1."
D			Incorrect. This is not a functional relationship since the *x*-value "–4" has many different *y*-values.

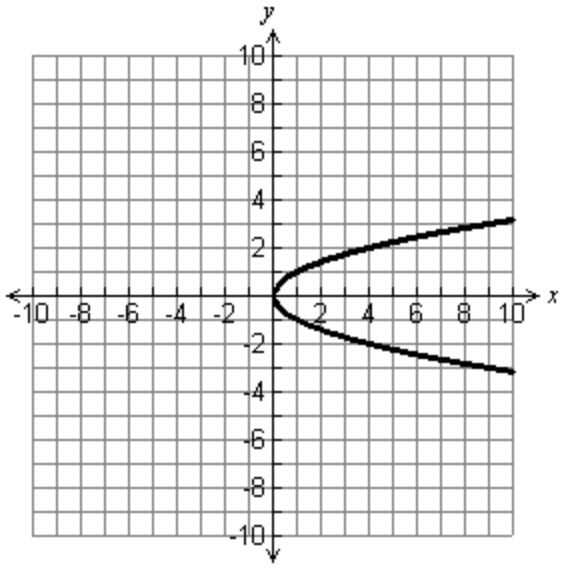
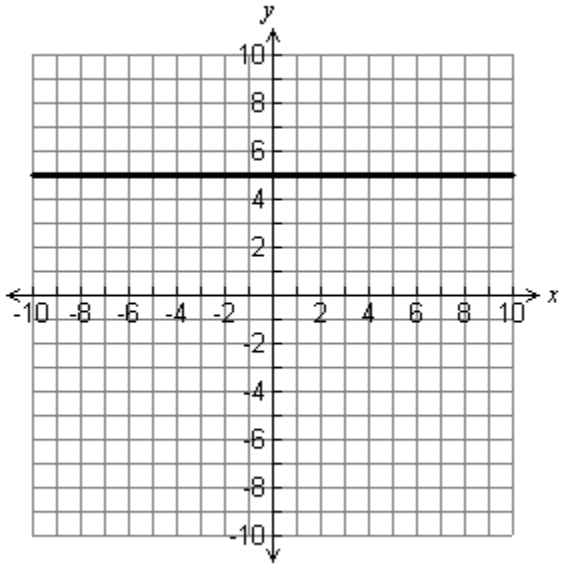
3. Which table of values represents a functional relationship?
(Multiple choice item based on the tables below.)

Answer Choice	Correct Answer Feedback	Incorrect Answer Feedback
A *x* | *y* 25 | 5 25 | –5 9 | 3 9 | –3 1 | 1		Incorrect. This is not a functional relationship since the *x*-value "25" has 2 *y*-values "5 and –5."

B x | y –4 | 8 –3 | 6 –7 | 14 –1 | 2 –7 | 16		Incorrect. This is not a functional relationship since the *x*-value "–7" has 2 *y*-values "14 and 16."
C x | y 1 | 6 1 | 8 1 | 10 1 | 12 1 | 14		Incorrect. This is not a functional relationship since the *x*-value "1" has many different *y*-values.
D x | y 3 | –10 7 | –10 0 | –10 –1 | –10 –5 | –10	Correct! This is a functional relationship since there is one x-value for each y-value.	

4. Which of the graphs below does NOT represent a functional relationship? (Multiple choice item based on the graphs below.)

Answer Choice	Correct Answer Feedback	Incorrect Answer Feedback
A 		Incorrect. This graph represents a functional relationship because it passes a vertical line test.
B 		Incorrect. This graph represents a functional relationship because it passes a vertical line test.

C 	Correct! The graph does not represent a functional relationship because it does not pass the vertical line test.	
D 	.	Incorrect. This graph represents a functional relationship because it passes a vertical line test.