ADAPTED NJDOE ASSESSMENT

GRADE 8

(To be administered after NPS Grade 8 Scope and Sequence Unit 4)

Assessed Standards:

- 8.SP.1
- 8.SP.4

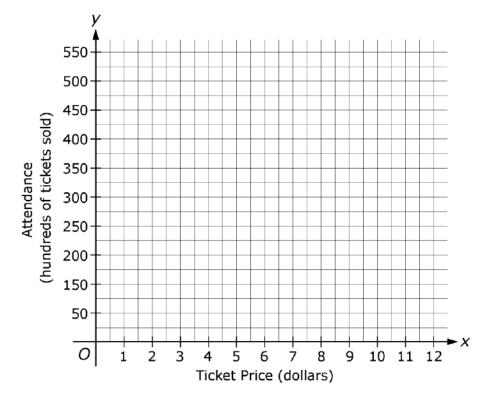


Grade 8 Unit 4

1. The manager at a theater collects the data below on the ticket price and attendance for eight other theaters over the course of one month.

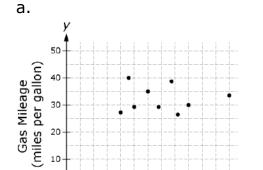
Theater	Ticket Price	Attendance	
Incator	(dollars)	(hundreds of tickets sold)	
Theater 1	10.00	415	
Theater 2	8.75	420	
Theater 3	7.50	505	
Theater 4	11.00	400	
Theater 5	11.75	388	
Theater 6	8.00	485	
Theater 7	12.00	320	
Theater 8	9.50	425	

Part A: Create a scatterplot of the data on the graph below.



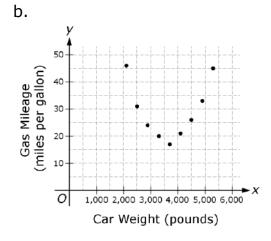
Part B: If a line of best fit for the data is drawn on the graph above, will it have a positive slope or a negative slope? Explain your answer.

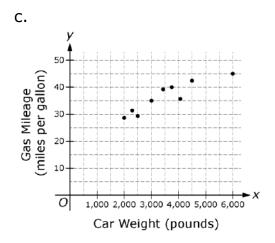
2. Which of the following scatterplots most likely shows the relationship between the weights of cars with a particular engine type, in pounds, and the gas mileages, in miles per gallon, for each car?

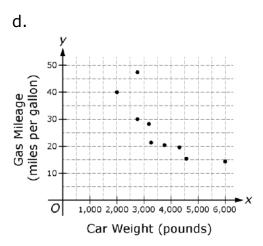


1,000 2,000 3,000 4,000 5,000 6,000

Car Weight (pounds)

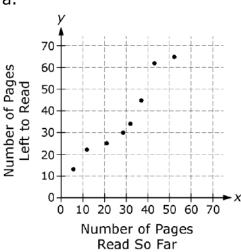




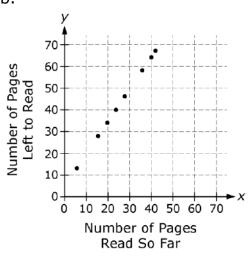


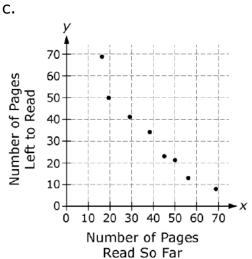
3. Sara is reading a book. Which of the following scatterplots most likely shows the relationship between the number of pages Sara has read so far and the number of pages she still has left to read?

a.

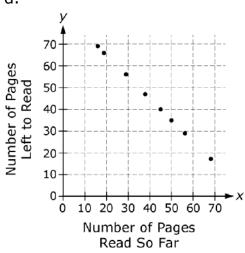


b.





d.



4. The boys varsity basketball coach collects data about the players on his team. The table below shows the height of each player and whether the player is a senior or a junior.

Player	Height (inches)	Squad	Player	Height (inches)	Squad
Taj	69	Senior	Kevin	72	Senior
Fred	65	Junior	John	60	Junior
Tom	65	Senior	Carlos	68	Senior
Alex	60	Junior	Vinny	67	Junior
Greg	61	Junior	Ted	63	Senior
Rex	71	Senior	Jared	68	Senior

Use the data to complete the frequency table below.

	60–64	65–69	70–74	Total
	inches	inches	inches	Total
Senior				
Junior				
Total				

5. All of the 48 students in the fifth grade class at Parker Elementary School voted for the favorite of their two teachers. Of the 25 girls in the fifth grade, 11 voted for Mr. Ackerman. Of the 23 boys in the fifth grade, 7 voted for Ms. Husted.

Part A: Complete the two-way frequency table below.

	Boys	Girls	Total
Mr. Ackerman			
Ms. Husted			
Total			

Part B: Which teacher was voted favorite by the greater number of students in the fifth-grade class?

Part C: Which teacher was voted favorite by the greater number of boys in the fifth-grade class?

Part D: What percent of the girls in the fifth-grade class voted for Ms. Husted as their favorite teacher?