

TEST PREP
11

Graphs and Probability

25

Suggested Time:
30 min

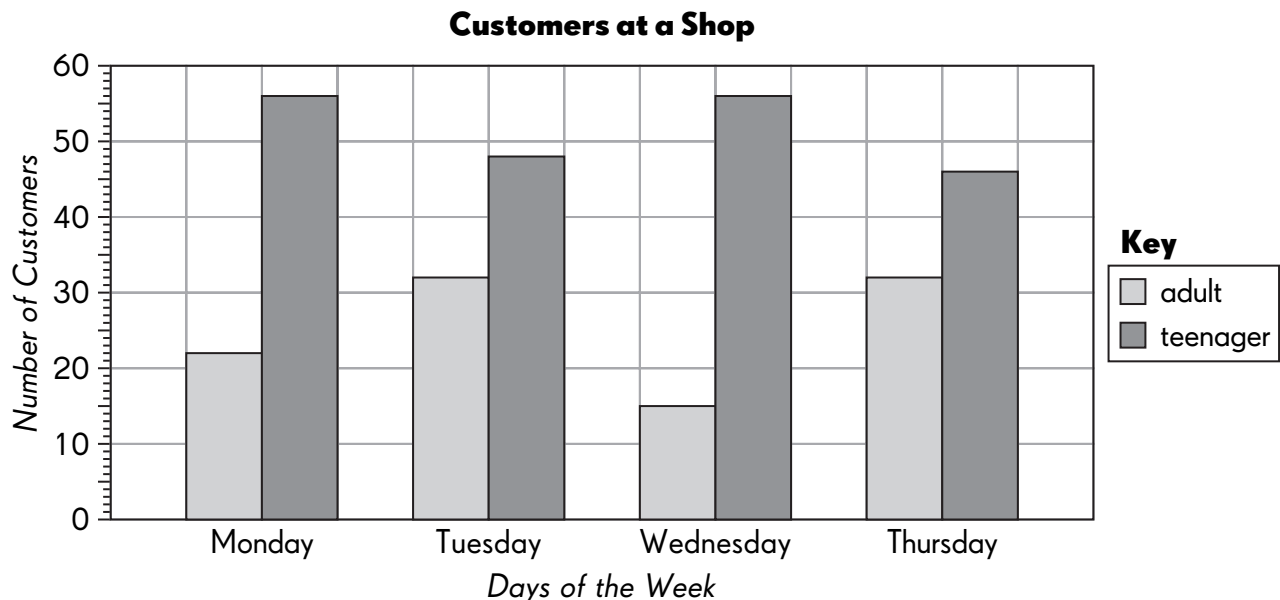
Multiple Choice

(5 × 2 points = 10 points)

Fill in the circle next to the correct answer.

Use the data in the graph to answer questions 1 and 2.

The graph shows the number of adult and teenage customers who visited a shop from Monday through Thursday.



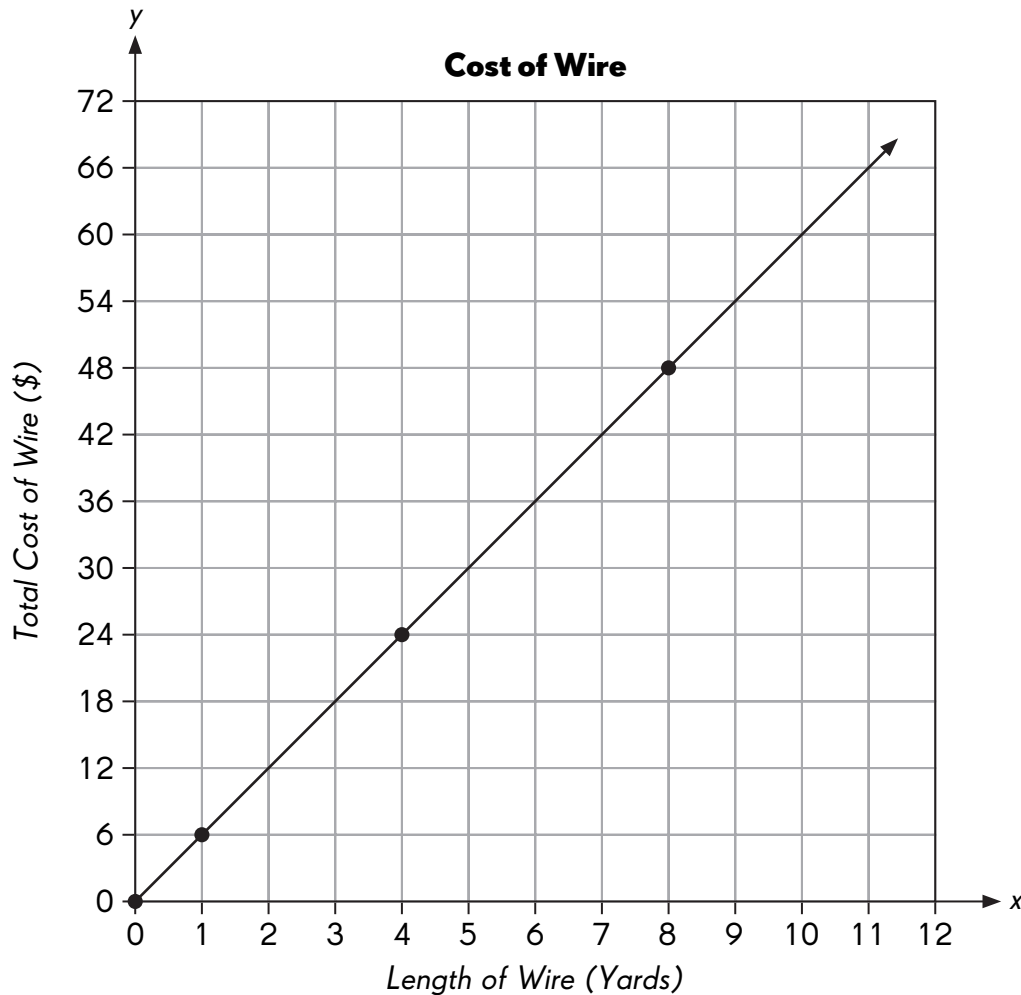
- On which 2 days were there the same number of customers?

(A) Monday and Tuesday	(B) Wednesday and Thursday
(C) Monday and Thursday	(D) Tuesday and Thursday

- On which day was there the largest difference between the numbers of adult and teenage customers?

(A) Monday	(B) Tuesday
(C) Wednesday	(D) Thursday

3. The graph shows the cost of various lengths of wire.



What is the cost of 9 yards of wire?

- (A) \$54 (B) \$60 (C) \$66 (D) \$70
4. Joe has 4 pairs of shoes: white, black, blue, and brown. He has 2 more pairs of socks than pairs of shoes. Find the number of combinations of pairs of shoes and pairs of socks that Joe can wear.
- (A) 5 (B) 6 (C) 15 (D) 24

Name: _____

Date: _____

5. A spinner is divided into 10 equal parts. Each part has a prize labeled on it – a pen, a mug, or a highlighter. The table shows the results of 30 spins.

Pen	Mug	Highlighter
8	15	7

Which is the likely set of prizes on the spinner?

	Pen	Mug	Highlighter	Total Number of Parts
(A)	6	2	2	10
(B)	3	5	2	10
(C)	1	5	4	10
(D)	4	2	4	10

Short Answer

(5 × 2 points = 10 points)

Complete. Use the data in the graph.

6. George and Henry worked as shop assistants during summer vacation. The graph shows the amount of money George and Henry made in 3 weeks.



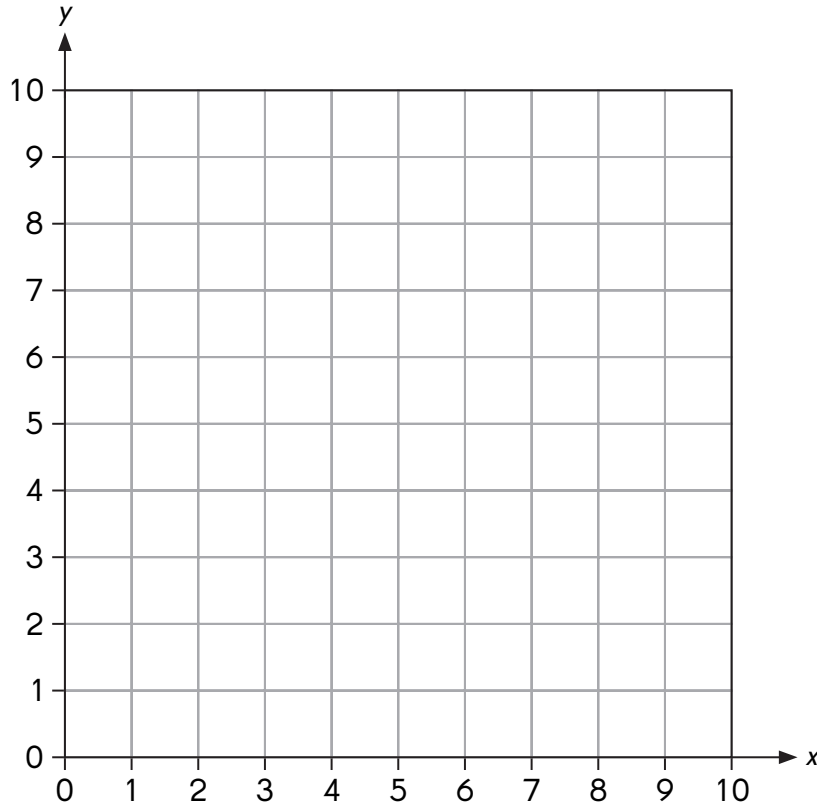
- a. Who made more money in the 3 weeks?
- b. How much more money did he make?

Name: _____

Date: _____

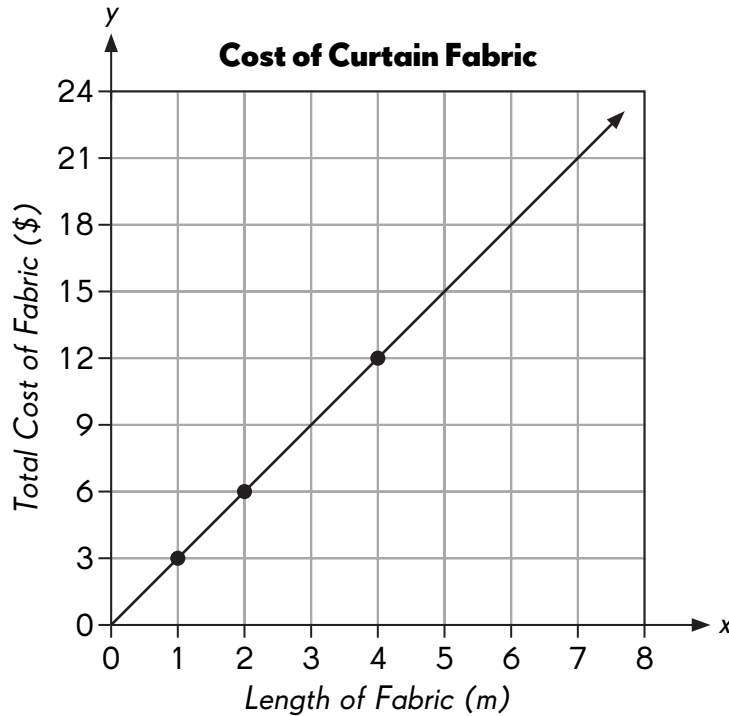
Plot the ordered pairs on the coordinate grid.

7. (4, 2) and (8, 10)



Complete. Use the data in the graph.

8. The graph shows the cost of various lengths of curtain fabric.



How many meters of curtain fabric can you buy with \$21?

Complete.

9. A shop sells ice cream in 3 flavors: strawberry, chocolate, and vanilla. The shop offers 2 toppings: peanuts and raisins. Draw a tree diagram to find the number of combinations the shop can offer.

Solve.

- 10.** A bag contains 5 white balls, 3 green balls and 4 black balls. A ball is drawn from the bag 50 times. The ball is put back in the bag after its color is recorded. The table shows the number of times each color was drawn.

Color	Number of Times Drawn
White	15
Green	26
Black	?

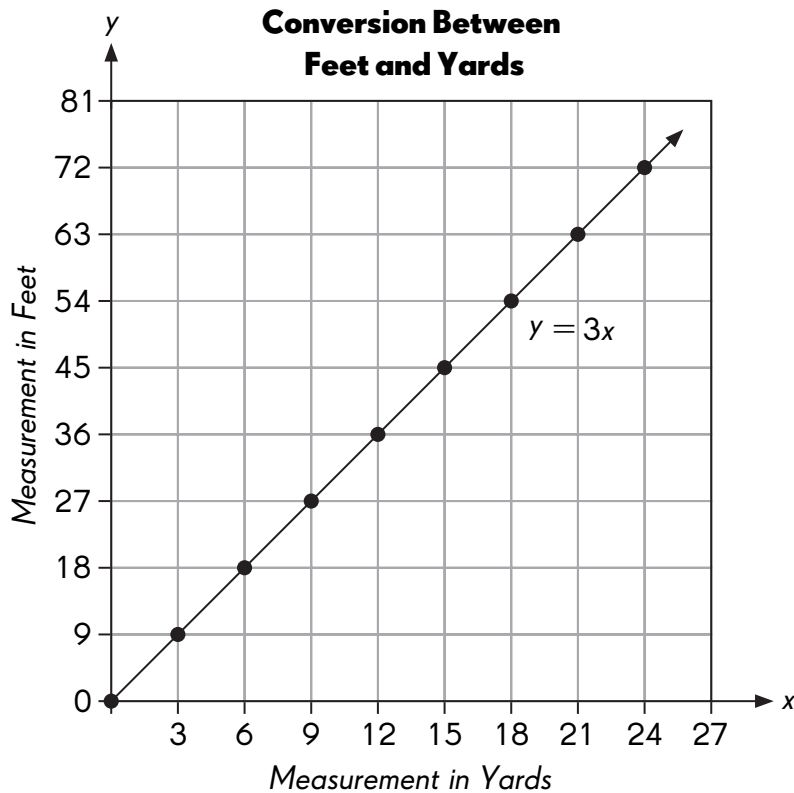
- a.** What is the experimental probability of drawing a black ball?
- b.** What is the difference between the theoretical probability and experimental probability of drawing a green ball?

Extended Response

(Question 11: 2 points, Question 12: 3 points)

Solve. Show your work.

11. The graph shows the conversion between feet and yards.



A rectangular plot of land measures 45 feet by 72 feet. Find the area of the land measured in square yards.

Name: _____

Date: _____

12. At a restaurant, the meat choices are roast turkey, fried chicken, and beef steak. The vegetable choices are long beans, salad, and broccoli.

- a.** Ms. Spencer wants to order 1 meat dish and 1 vegetable dish. Draw a tree diagram to find the number of combinations she can choose from.

- b.** If grilled fish is also available, how many combinations can Ms. Spencer choose from?