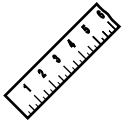


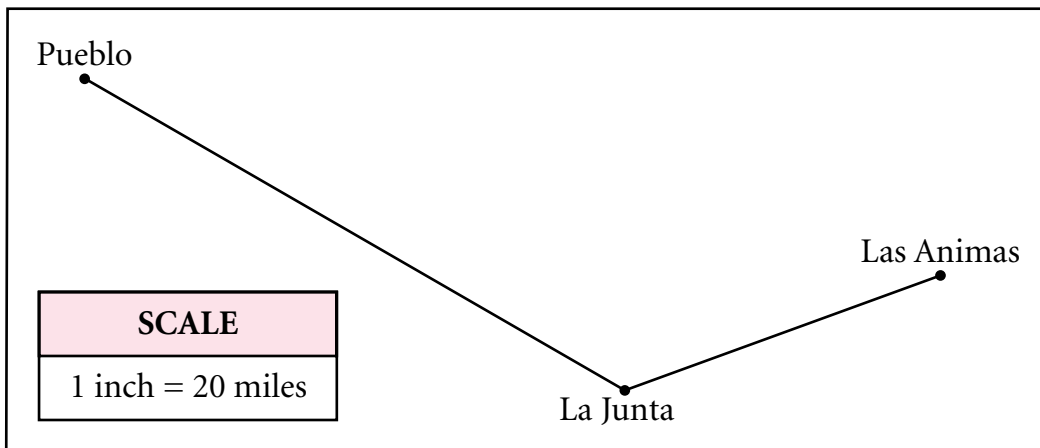
12



From your punch-out tools, use the ruler to help you solve this problem.

Juan and his family drove from Pueblo to Las Animas. On their trip they stopped in La Junta to visit the Koshare Indian Museum and Kiva. Juan made the map below as part of a class report about the trip.

Family Trip



Part A Use Juan's map to find the total distance driven from Pueblo through La Junta to Las Animas.

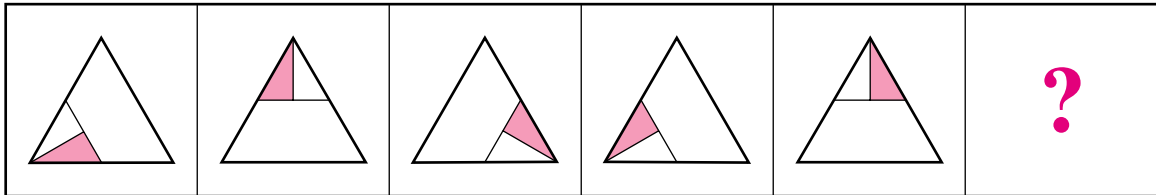
_____ miles

Part B On the lines below, use words, numbers, or symbols to explain how you found your answer.

CSAP

Mathematics

13 Study the pattern of triangles below.



What triangle will continue the pattern?

-
-
-
-

This item appeared at only one grade level.

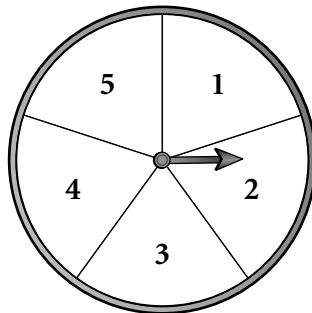
Grade 7

Standard 2.1a: Patterns, Functions, and Algebra

Subcontent Area: not assigned

- 14** Study the spinner with 5 evenly spaced numbers, shown below.

Spinner



What is the probability of spinning the arrow and landing on 5?

- 25%
- $\frac{1}{4}$
- 0.20
- $\frac{5}{1}$

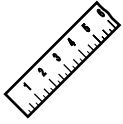
This item appeared at only one grade level.

Grade 7

Standard 3.6b: Data Analysis, Probability, and Statistics

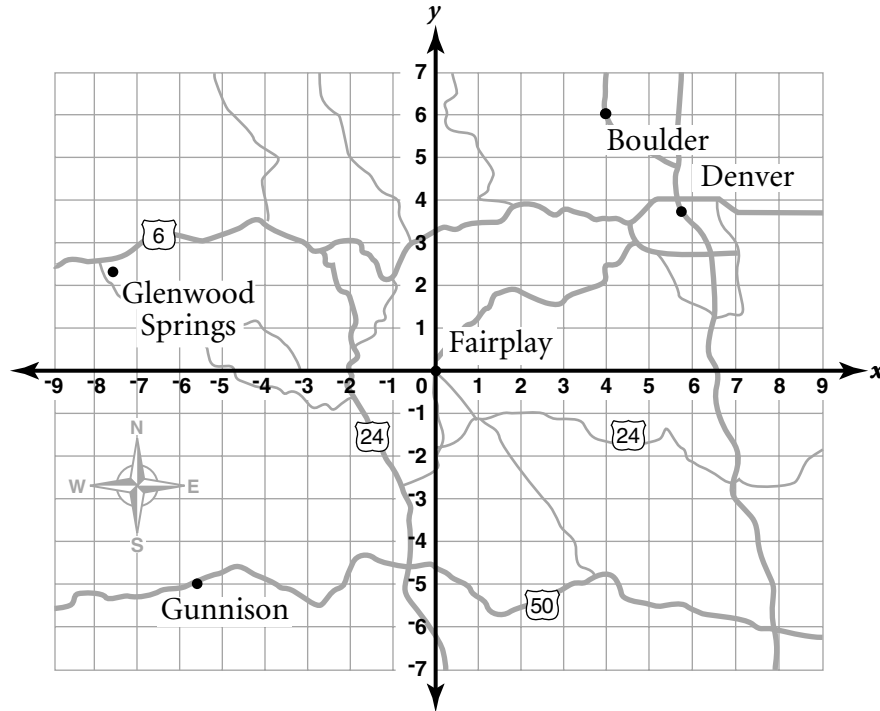
Subcontent Area: number sense

15



From your punch-out tools, use the ruler to help you solve this problem.

Study the map and grid below. The origin of the grid is located at Fairplay.



Two airplanes depart and both will fly a straight course.

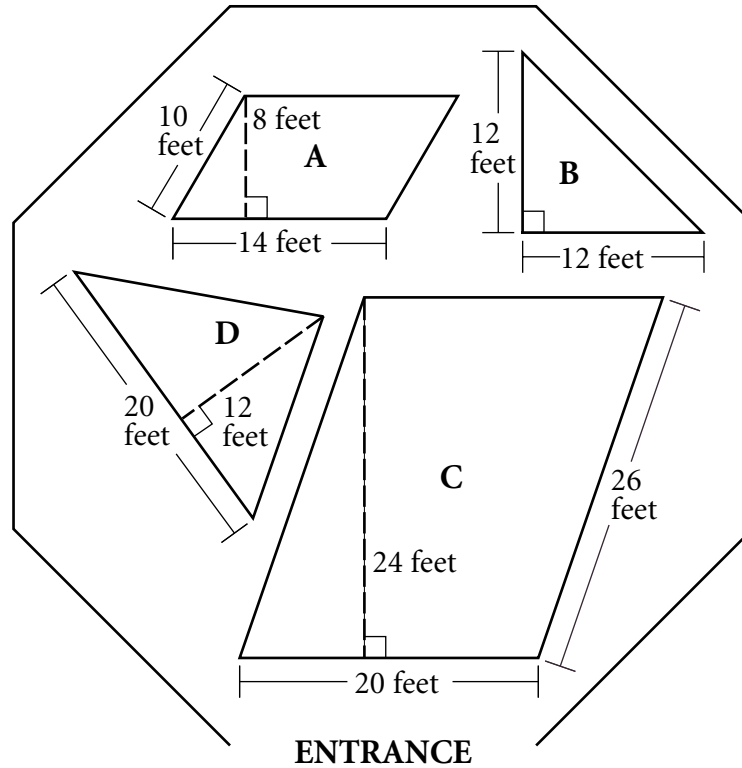
Part A Airplane A departs from Glenwood Springs and flies over a place located on the map at coordinates $(1, 5)$ on the grid. Plot these coordinates and label them as Point R. Draw a straight line from Glenwood Springs through Point R to the edge of the map.

Part B A day later, Airplane B departs from Gunnison and flies over a place located on the map at coordinates $(-3, -2)$ on the grid. Plot these coordinates and label them as Point S. Draw a straight line from Gunnison through Point S to the edge of the map.

Part C On the lines below, write the coordinates of the point on the grid where your 2 straight lines intersect.

(_____ , _____)

- 16** An amusement park has opened a new food court. A diagram of the food court is shown below. Each space (A, B, C, D) is labeled with measurements.



Part A Space C will be tiled and used as an eating area. Each tile measures 1 square foot and costs \$2.

How much will it cost to tile the floor of the eating area? In the space below, show your work and write your answer on the line.

\$ _____

Part B Lickity-Splits wants to rent Space B to sell ice cream. The amusement park charges \$20 rent per month for each square foot of Space B.

How much will it cost Lickity-Splits to rent Space B for a year? In the space below, show your work and write your answer on the line.

\$ _____

Part C Ned's Nachos is deciding whether to rent Space A or Space D. The amusement park owners will rent Space A for \$2,800 per month and Space D for \$2,400 per month.

Help Ned decide whether Space A or Space D is the better value for his money. In the space below, show your work. Explain your reasoning and write your answer on the line.

_____ is the better value.

- 17** Pixie Playland is building a small carousel with a radius of 7 feet and a large carousel with a radius of 14 feet.

Part A Find the circumferences of the small and large carousels to the nearest foot. In the space below, show your work and write your answers on the lines.

Circumference of small carousel _____ feet

Circumference of large carousel _____ feet

Part B Find the ratio of the circumference of the small carousel to the circumference of the large carousel. In the space below, show your work and write your answer on the line.

Ratio _____

Part C A third carousel has a circumference of 176 feet. Find the radius of this carousel.
In the space below, show your work and write your answer on the line.

Radius _____ feet

18

Bill will make pancakes for 20 members of his Boy Scout troop. He will use the pancake recipe that serves 4 people, shown in the table below. Complete the table to show the amount of each ingredient Bill will use to make pancakes to serve 20 people.

Ingredient	Amount to Serve 4 People	Amount to Serve 20 People
Flour	$1\frac{1}{3}$ cups	
Salt	$\frac{1}{8}$ teaspoon	
Sugar	$2\frac{1}{2}$ tablespoons	
Baking powder	$1\frac{1}{4}$ teaspoons	
Eggs	1	
Melted butter	3 tablespoons	
Milk	$\frac{3}{4}$ cup	

Rubric

Exemplary Response

•

Ingredient	Amount to Serve 4 People	Amount to Serve 20 People
Flour	$1\frac{1}{3}$ cups	$6\frac{2}{3}$ cups
Salt	$\frac{1}{8}$ teaspoon	$\frac{5}{8}$ teaspoon
Sugar	$2\frac{1}{2}$ tablespoons	$12\frac{1}{2}$ tablespoons
Baking powder	$1\frac{1}{4}$ teaspoons	$6\frac{1}{4}$ tablespoons
Eggs	1	5
Melted butter	3 tablespoons	15 tablespoons
Milk	$\frac{3}{4}$ cup	$3\frac{3}{4}$ cups

Score Points: Apply 3-point holistic rubric.

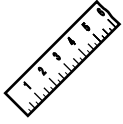
This item appeared at only one grade level.

Grade 7

Standard 6.4b: Operation and Calculation

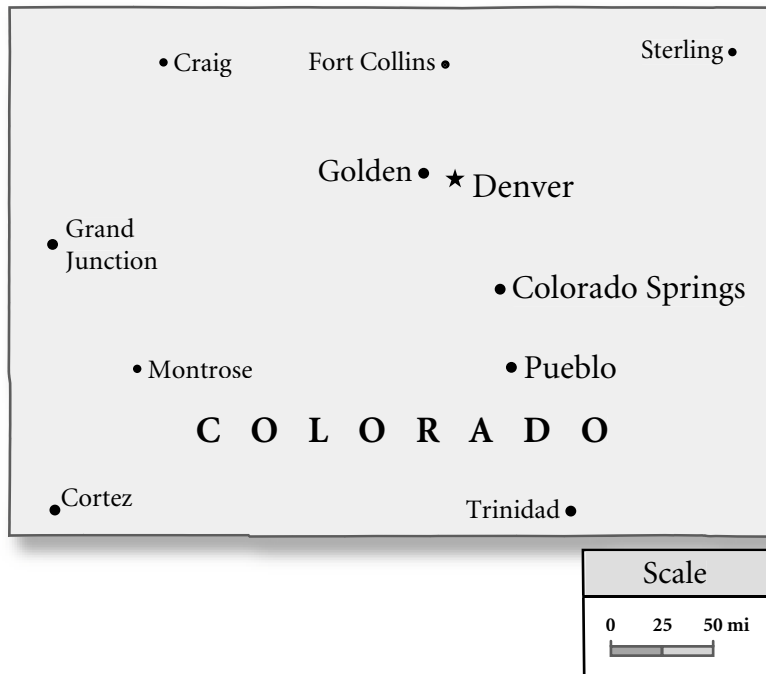
Subcontent Area: number sense

19



From your punch-out tools, use the ruler to help you solve this problem.

Study the map below.



What is the approximate straight-line distance between Cortez and Grand Junction?

- 80 miles
 100 miles
 130 miles
 170 miles

This item appeared at two adjacent grade levels.

Grade 7

Standard 5.3a: Measurement

Subcontent Area: not assigned

Grade 8

Standard 5.3a: Measurement

Subcontent Area: proportional thinking

20

Students are going on a field trip to the Colorado History Museum. They will ride on 3 buses. Each bus seats a maximum of 40 students. Study the table below, which shows the proportion of seats occupied on each bus.

Bus	Seats Occupied
1	60%
2	0.85
3	$\frac{7}{8}$

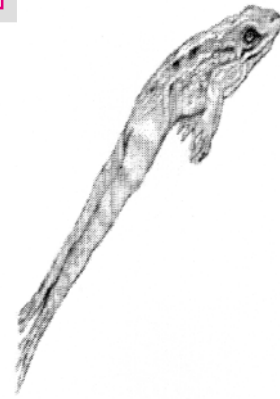
How many students are on each bus? In the space below, show your work and write your answers on the lines.

Bus 1 _____ Bus 2 _____ Bus 3 _____

21

A tree frog is 10 feet ahead of a bullfrog. Every time the tree frog jumps 1 foot, the bullfrog jumps 3 feet. How many times will the bullfrog have to jump to catch up with the tree frog?

In the space below, explain or show how you found your answer and write your answer on the line. You may use charts, diagrams, or words in your explanation.



_____ jumps

