Assessment : End-of-Unit Assessment

Problem 1

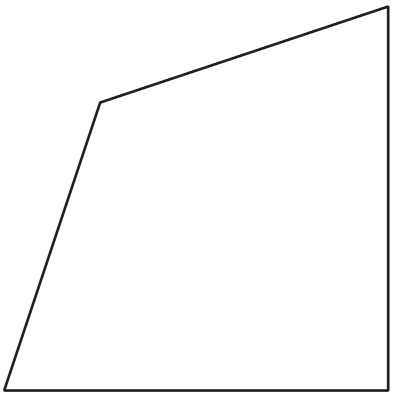
Students draw a shape with specified properties. The two sides that are equal do not need to make the square corner as in the sample image. Students also may not identify the two sides that are the same length as in the sample solution. Students will need access to a ruler for this problem.

Statement

Draw a quadrilateral with one square corner and two equal sides.

Solution

Sample response:



The two sides that meet in the bottom right are equal and make a square corner.

Aligned Standards

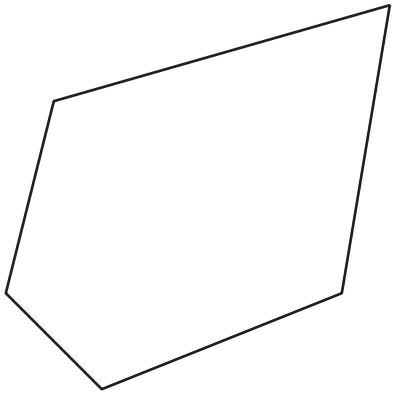
2.G.A.1

Problem 2

Students identify a pentagon. The given pentagon is not regular so students will need to rely on the definition of a pentagon rather than recognizing the shape by sight.

Statement

Choose the name of the shape.



A. Hexagon

B. Triangle

C. Quadrilateral

D. Pentagon

Solution

D

Aligned Standards

2.G.A.1

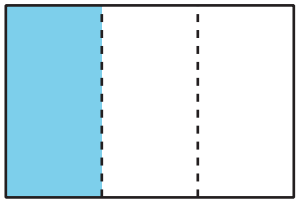
Problem 3

Students identify squares partitioned into thirds with one third shaded. The distractors are a square that is divided into 3 unequal parts, with one part shaded, and a square that is divided into 4 equal parts with one part shaded. Students who select either of the distractors need further work partitioning shapes into equal parts in different ways.

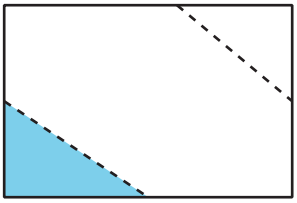
Statement

Select **2** drawings that have one third of the square shaded.

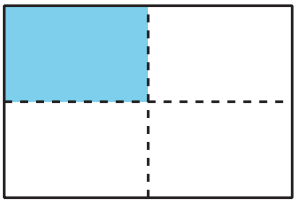
A.



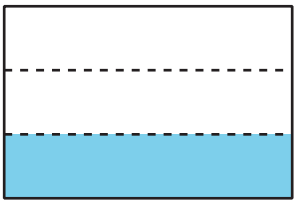
B.



C.



D.



Solution

["A", "D"]

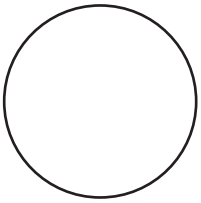
Aligned Standards

2.G.A.3

Problem 4

Students partition a circle into 4 equal parts and explain why the whole circle can be viewed as four fourths of the circle. It is not important that the four parts of the circle be exactly equal. Students will need to "eyeball" their partitions and the four parts should be roughly equal.

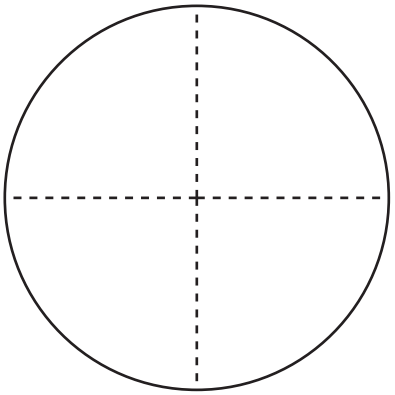
Statement



1. Split the circle into 4 equal parts.
2. Explain why 4 fourths of the circle is the whole circle.

Solution

1. Sample solution:



2. There are 4 equal parts in the whole circle so four fourths is the whole thing.

Aligned Standards

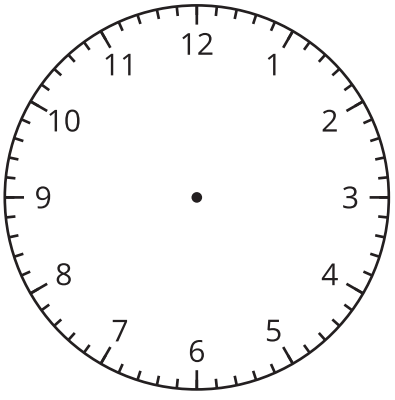
2.G.A.3

Problem 5

Students draw the hour and minute hands to show a time and read the time on a different clock. They also determine whether these times are a.m. or p.m. based on whether the event happens in the morning or afternoon. For the student response to the first problem, the minute hand should be accurately pointing to the 9. The hour hand does not need to be precisely placed but should be between 6 and 7.

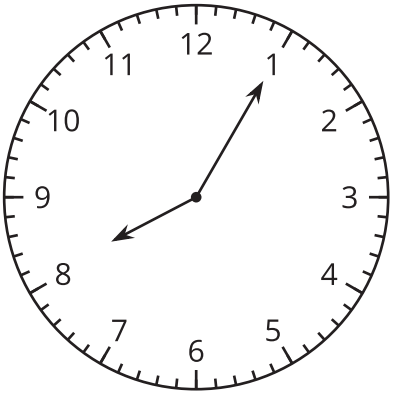
Statement

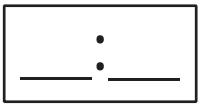
1. Jada gets up in the morning at 6:45. Show the time on the clock face. Then circle a.m. or p.m.



a.m. or p.m.

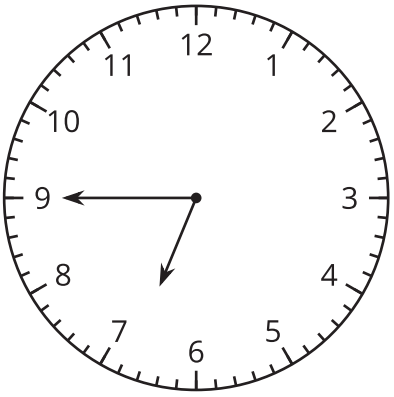
2. Jada goes to bed at the time on the clock. Write the time and circle a.m. or p.m.





a.m. or p.m.

Solution



1. 6:45 a.m.
2. 8:05 p.m.

Aligned Standards

2.MD.C.7

Problem 6

Students add numbers within 100 using the context of money. Students may make a mistake with their arithmetic or may forget how many cents are in a nickel or a quarter. They also need to recall that there are 100 cents in 1 dollar in order to answer the second question.

Statement

Jada has 2 pennies, 3 nickels, and 1 quarter.

1. How many cents does Jada have? Explain or show your reasoning.
2. How many more cents does Jada need to have $1? Explain or show your reasoning.

Solution

1. 42: 1 quarter is 25 cents and 3 nickels are 5, 10, 15 cents. That makes 40 cents total. Then 2 more pennies make 2 cents or 42 cents total.
2. 58: 50 and 40 make 90, 2 and 8 make 10, and $90 + 10 = 100$. 100 cents is a dollar.

Aligned Standards

2.MD.C.8

Problem 7

Students solve a two-step story problem with a context of money. While the previous item uses cents, this item uses dollars. The first step is addition and the second step is subtraction. The reasoning given by Andre opens up another natural method to solve the problem, also requiring two steps, namely subtract 53 from 55 and then add 6. When the operations are done in this way, no composing or decomposing of units occurs.

Statement

Jada has $26 and Andre has $35. They want to buy a video game that costs $53.

1. Andre says that they have enough money to buy the video game because $20 and $35 are more than $53. Explain why Andre is correct.
2. How many dollars will Jada and Andre have left after they buy the game? Show your thinking.

Solution

1. $20 + 35 = 55$ which is enough to buy the video game.
2. Sample response 1: $8.

   First I added 26 and 35.

   $20 + 30 = 50$

   $6 + 5 = 11$

   Then I took away 53.

   $50 - 50 = 0$

   $11 - 3 = 8$

   So they have 8 dollars left.

   Sample response 2:

   $55 - 53 = 2$. Then Jada still had $6 more so that makes $8 total.

Aligned Standards

2.MD.C.8, 2.OA.A.1