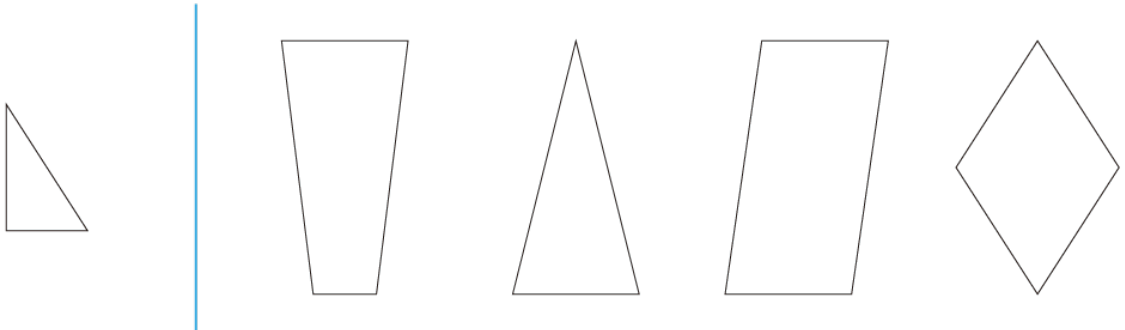


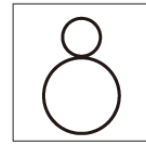
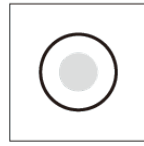
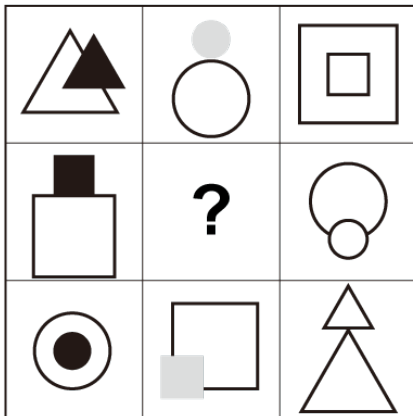
Sample questions 4th grade

Figurative reasoning

The figure on the left is a piece of paper that is folded twice.
What is the original shape of the paper?



Select the most appropriate choice to complete the table.



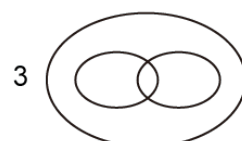
Verbal reasoning

Select the diagram that best shows the relationship between the following words.

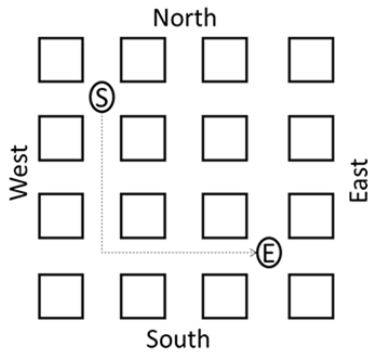
Country, America, France

Hat, beanie, baseball cap

Money, coin, quarter



Answer the following questions.



How many ways can you get from point S to point E with only four blocks' worth of walking?

ways

Describe the dotted path between points S and E.

North

Go blocks to the East and blocks

South

West.

to the South.

East.

Numerical reasoning

Different letters represent different numbers.

Find all the numbers.

$$\begin{array}{r} 83A \\ + 5A \\ \hline 8A8 \end{array}$$

$$\begin{array}{r} 3B5 \\ + 191 \\ \hline 496 \end{array}$$

$$\begin{array}{r} CC6 \\ + 338 \\ \hline 1114 \end{array}$$

Answer: A =

B =

C =

Fill in the missing number.

75 73 72 72 69 ? 66 70 63












Answer:

In this calculation, different letters represent different numbers.
 What numbers do A and B represent?

$$\begin{array}{r}
 1\ B \\
 7\ A \overline{) 9\ B\ 6} \\
 \underline{7\ A} \\
 A\ 1\ 6 \\
 \underline{A\ 1\ 6} \\
 0
 \end{array}$$

Answers: A = B =

Different shapes represent different numbers.
 Find all the numbers.

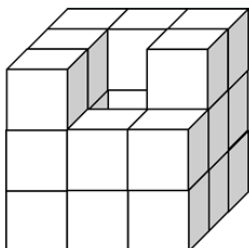
| | | | | |
|---|---|---|--|---|
|  |  |  | | Answer: |
|  |  |  | |  = |
| x | | 4 | |  = |
| | | | |  = |
|  | 7 |  | | |

Express the extended fraction as a simple fraction in lowest terms.

1 $\frac{1}{3 + \frac{1}{2 + \frac{1}{1 + \frac{1}{2}}}} = \frac{\quad}{\quad}$

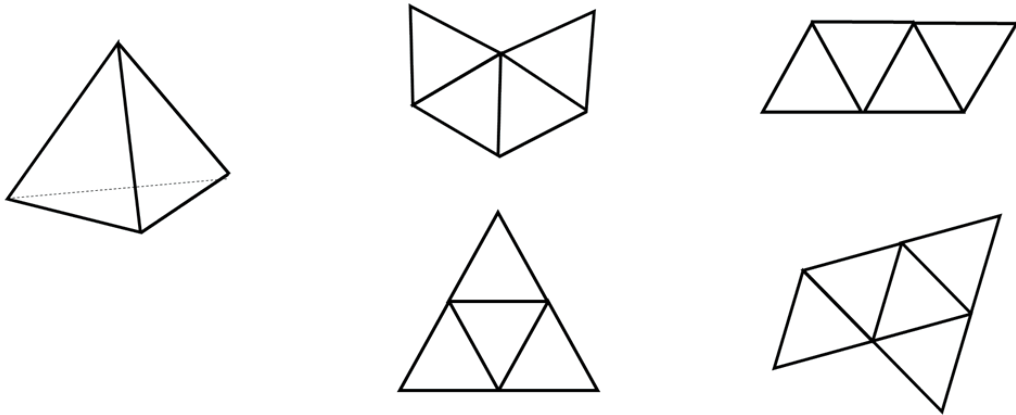
Spatial reasoning

This figure is made with cubes of identical size.
 How many cubes are in this figure? Answer the minimum amount you would need.

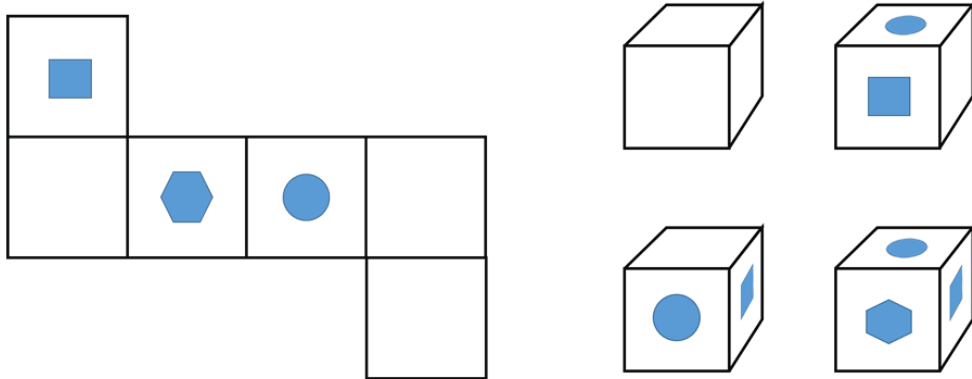


Answer: cubes

Select the diagrams that show how the folded model on the left will look when unfolded.
There can be more than one answer.

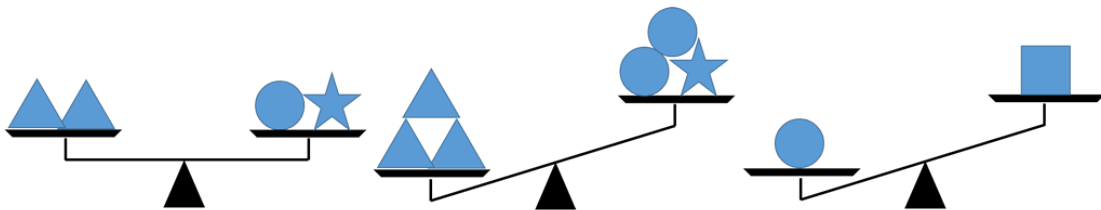


Select the folded model that shows how the pattern on the left will look when folded.



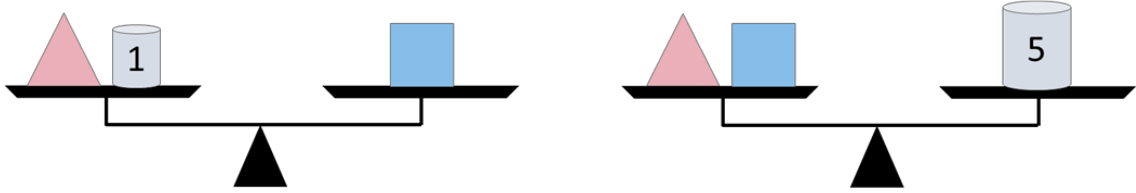
Logical reasoning



Rank the shapes from lightest (1) to heaviest (4).
Write the correct numbers in the blanks.



Answers:

Look at the scales below. Figure out the weight of each shape.



Answer:  =  =

There are 10 coins. The sum of these quarters, dimes, and nickels is equal to 150 cents. You have each type of coin. How many of each coin do you have? Fill in the numbers.

$$\begin{array}{c}
 \text{Quarter} \\
 \text{25 cents}
 \end{array}
 \times \boxed{} +
 \begin{array}{c}
 \text{Dime} \\
 \text{10 cents}
 \end{array}
 \times \boxed{} +
 \begin{array}{c}
 \text{Nickel} \\
 \text{5 cents}
 \end{array}
 \times \boxed{} = 150 \text{ cents}$$

Allen has 6 siblings. Steve (Allen's older brother) is 2 years younger than John. Maddy is 1 year older than Olivia who is 3 years younger than Allen. Allen is 6 years younger than Sarah who is 4 years older than Steve. Fred is 1 year younger than Olivia. If the siblings were ranked 1 through 7 (1 being the oldest and 7 being the youngest), what rank would Allen have?

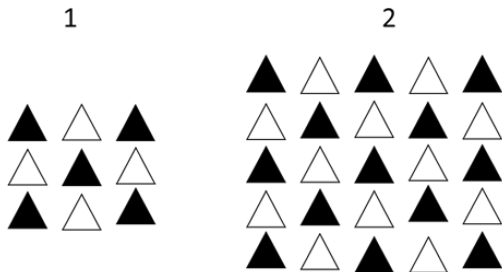
2 3 4 5 6

Maddy, John, Coco, and Georgia all live in a straight line. Maddy lives 3 miles from Coco. Georgia lives $\frac{2}{3}$ the distance from Maddy that Coco does. And John lives in between Georgia and Coco. How far does John live from Maddy?

2 miles 1 mile $\frac{3}{2}$ miles $\frac{5}{3}$ miles $\frac{5}{2}$ miles

Competitive math

We are making a square using triangles. In each step, a layer of triangles is added to the outer layer. How many black triangles are there in step 3?

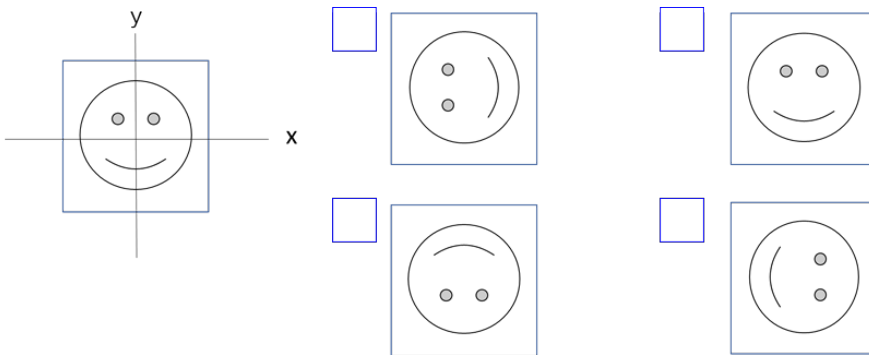


Answer:

23 21 22

24 25 26

The figure on the left is a picture on a card. What would the figure look like if the card was flipped about the x axis, rotated 90 degrees clockwise once, flipped about the y axis, then rotated 90 degrees counterclockwise twice?



Find the two primes between 10 and 25 for which, if you double them and add 1, the result is still a prime. These are called "Sophie Germain primes."

1st prime number: 2nd prime number:

The ratio of a fruit stand containing oranges, apples, and bananas is 2 : 3 : 4, with a total of 315 fruits. A customer buys 10 oranges, 15 apples and 20 bananas. The stand added 20 oranges and 10 apples. What is the new ratio of oranges, apples and bananas?

Answer: : :