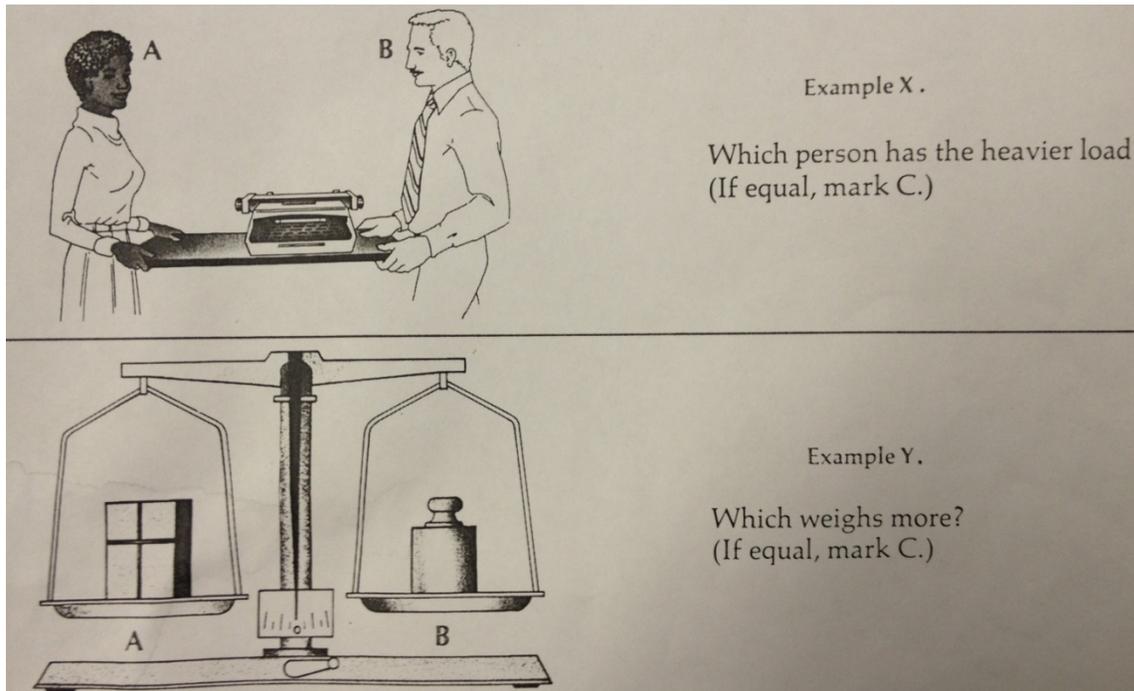


## Mechanical Reasoning

This test consists of a number of pictures and questions about these pictures. Look at the two examples below.



Example X .

Which person has the heavier load?  
(If equal, mark C.)

Example Y .

Which weighs more?  
(If equal, mark C.)

Example X shows a picture of two people carrying a typewriter on a board and asks, **which person has the heavier load? (If equal, mark C.)** Person **B** has the heavier load because the weight is closer to him than to person **A**.

Example Y asks, **which weighs more? ( If equal, mark C.)** As the scale is perfectly balanced, **A** and **B** must weigh the same, so **C** is the correct answer.

This assessment evaluates the ability to visualize a three-dimensional object from a two-dimensional pattern and how this object would look if rotated in space. This ability is important in fields such as design, architecture, manufacturing, and other occupations

requiring visualization. This ability is needed for any form of work in which it is important to be able to visualize objects and to understand how they relate to each other.

It is a 15 minutes test consisting of 35 problems.

This test consists of patterns which can be folded into figures. To the right of each pattern there are four figures. You are to decide which **one** of these figures can be made from the pattern shown. The pattern always shows the **outside** of the figure. Here is an example:

Example X.

In Example X, which one of the four figures- A, B, C, D- can be made from the pattern at the left? A and B certainly cannot be made; they are not the right shape. C is the correct both in shape and size. You cannot make D from this pattern.

Example Y.

In example Y all the figures next to the pattern are correct in **shape**, but only one of them can be made from this pattern. Note that when the pattern is folded, the figure it makes will have three gray surfaces. Two of these will be the largest surfaces, either of which could be the top or the bottom of a box. The other will be one of the smallest surfaces, which would be one end of the box.

Now look at the four figures:

Figure A is wrong. The long, narrow side is not gray in the pattern and the largest surface must be gray.

Figure B is wrong. The largest surface must be gray, although the gray end could be at the back.

Figure C is wrong. The gray top and end are all right, but there is no long gray side in the pattern.

Figure D is correct. A large gray surface is shown as the top, and the end surface shown is also gray.

So, you see, all four figures are correct in shape, but only one-D-shows the gray surfaces correctly.