

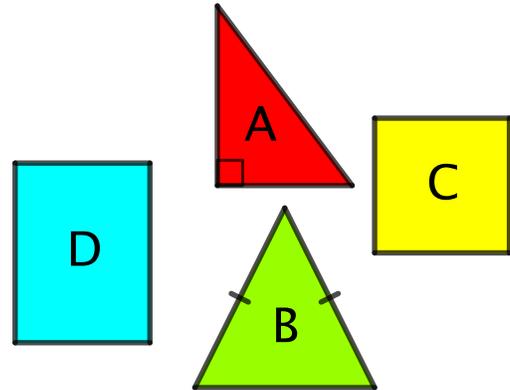


Problem of the Week

Problem B

Alternate Dimensions

The four shapes to the right are each drawn with a horizontal base and a vertical height. Figure A is a right-angled triangle, Figure B is an isosceles triangle, Figure C is a square, and Figure D is a rectangle. The figures are not drawn to scale.



Using the following clues, determine the measure of the (horizontal) base and the measure of the (vertical) height of each figure.

1. The measure of the base of Figure A is the same as the measure of the base of Figure D.
2. The measure of the base of Figure A is one unit less than the measure of the base of Figure B.
3. The side length of Figure C is the same as the measure of the base of Figure A.
4. The measure of the height of Figure B is the same as the measure of the height of Figure A and also the same as the measure of the base of Figure B.
5. The area of Figure C is 9 square units.
6. The total area of all four figures is 38 square units.

STRANDS PATTERNING AND ALGEBRA, MEASUREMENT

