Includes

Polygons,

Volume,

Pythagorean Theorem,

Circles,

Triangles,

Quadrilaterals,

Coordinate Geometry,

Ratios, Similarity, and More!

Geometry Chain Letters

12 Exercises

PREVIEW

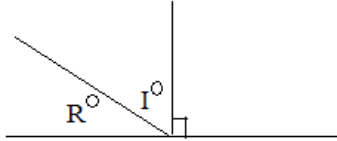Geometry "Chain Letters" are composed of 5 brief math questions.

Answer each one, in sequence, to reach the last letter -→ the solution!

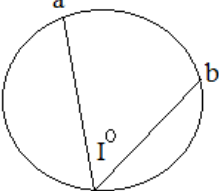Here is a trial run for you to sample.

Geometry Chain Letters

6 - 8 - T is a Pythagorean Triple

A convex polygon with T sides has R diagonals...

R° I°

a

b

I°

The degree measure
of arc ab is A degrees

The area of a rectangle with length A and width T is L..

What is L?

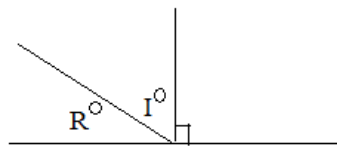SOLUTIONS→

Geometry Chain Letters
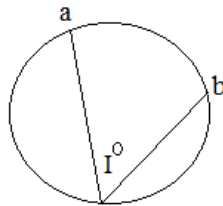
6 - 8 - T is a Pythagorean Triple

$$T = 10$$

A convex polygon with T sides has R diagonals…

$$R = \frac{10(10 - 3)}{2} = 35$$

$$I = 55$$

R° I°

a

b

I°

The degree measure
of arc ab is A degrees

$$A = 110$$

The area of a rectangle with length A and width T is L..

$$110 \times 10 = 1100$$

What is L? $L = 1100$

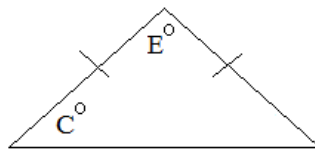Here are 12 more chains, involving a variety of geometry topics…

Enjoy!

1)

O is the number of sides in an octagon...

C is the circumference of a circle with radius O,
rounded to the nearest whole number...

E°

C°

The vertex angle above has a supplementary
angle of measure A degrees...

N is the perimeter of a square with area A.

What is N?

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12)

When the coordinate (3, 8) is reflected over the y-axis, the result is (x, y)...
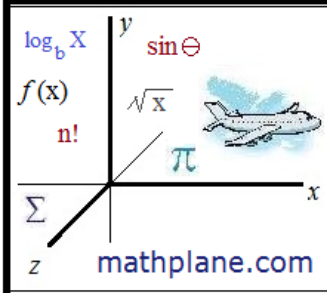
$$x + y = B$$

When the coordinate (7, B) is reflected over the x-axis, the result is (i, j)...

$$i + j = L$$

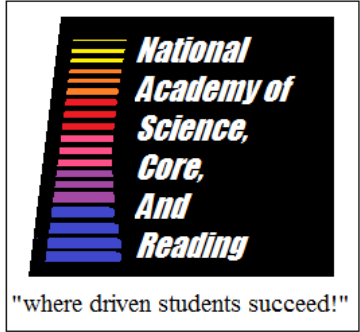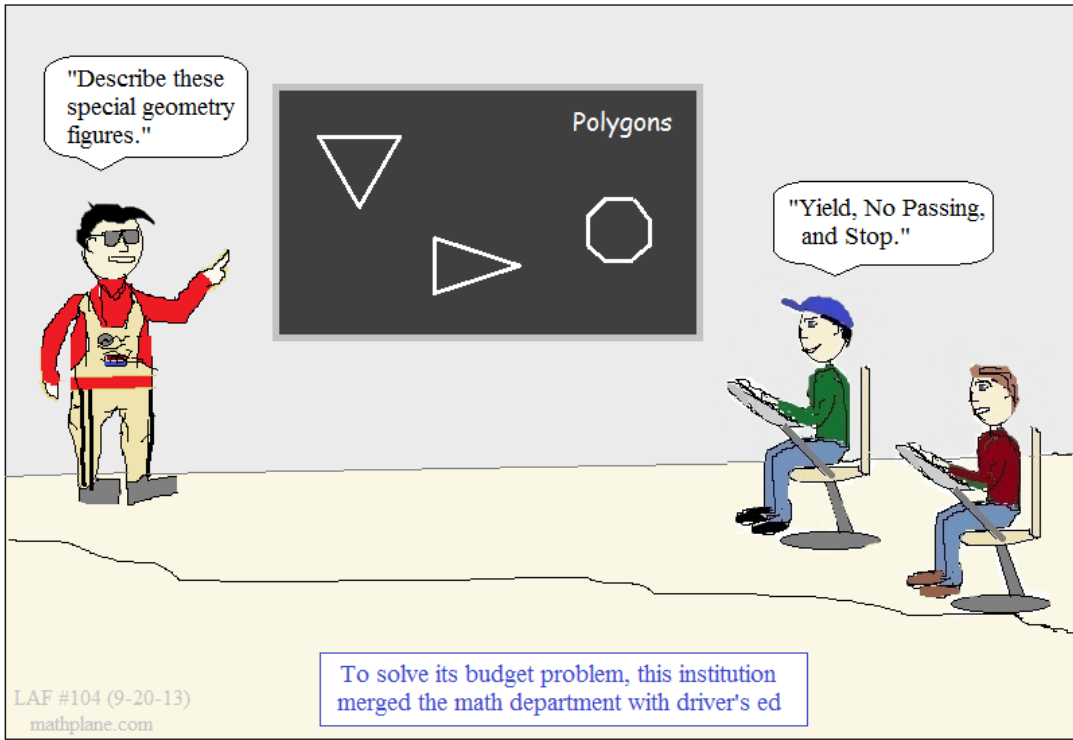A is the perimeter of a parallelogram with sides L and B...

The volume of a rectangular prism with sides B, L, and A is C...

$\log_b X$ $\sin \ominus$

$f(x)$ $\sqrt{x}$

$n!$

π

Σ

z mathplane.com

If the angle measure of C is C, then K is the angle measure of 1/2 the supplement of C...

What is K?

SOLUTIONS-→
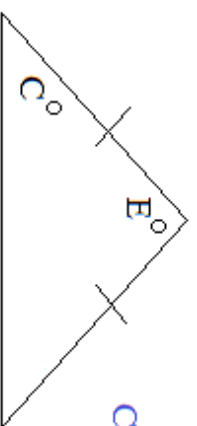
Geometry Chain Letters

O is the number of sides in an octagon...

$$O = 8$$

C is the circumference of a circle with radius O, rounded to the nearest whole number...

$$C = 2\pi \text{ (radius)} = 16\pi \approx 50.26$$

$$C = 50$$

The vertex angle above has a supplementary angle of measure A degrees.

$$C + C + E = 180$$

$$E = 80$$

A supplementary angle is 100 degrees $A = 100$

N is the perimeter of a square with area A.
If area of square is 100, then sides are 10... $4 \times 10 = 40$

What is N? $N = 40$

Geometry Chain Letters

When the coordinate (3, 8) is reflected over the y-axis, the result is (x, y)...

$$x + y = B$$

(-3, 8)   B = -3 + 8 = 5

When the coordinate (7, B) is reflected over the x-axis, the result is (i, j)...

$$i + j = L$$

(7, 5) reflected over
x-axis ----> (7, -5)   L = 7 + (-5) = 2

A is the perimeter of a parallelogram with sides L and B...
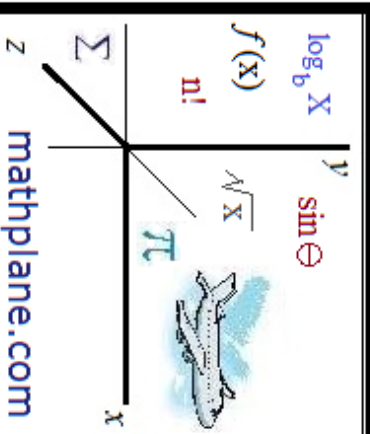
$$5 + 2 + 5 + 2 = 14$$ A = 14

The volume of a rectangular prism with sides B, L, and A is C...

$$C = 5 \times 2 \times 14 = 140$$

If the angle measure of C is C, then K is the angle measure of 1/2 the supplement of C...
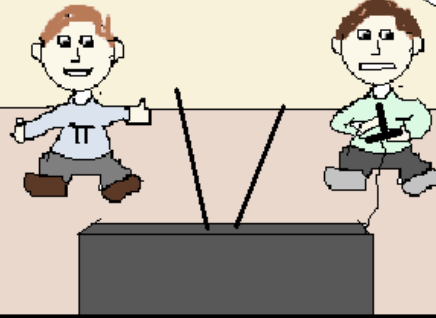
Supplement of C is 40...
1/2 the supplement of C is 20..

SOLUTIONS

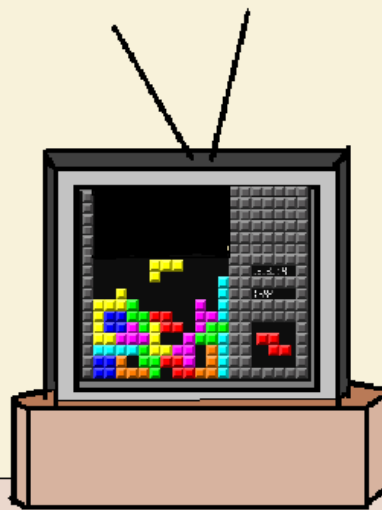B ⟹ L ⟹ A ⟹ C ⟹ K

What is K?   K = 20

$\log_b X$ $\sin \Theta$

$f(x)$ $\sqrt{x}$ π n!

Σ

z   y   x
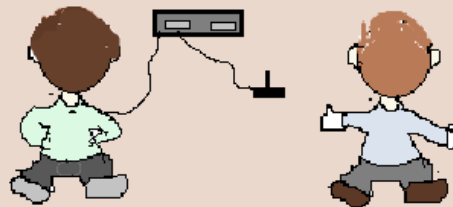
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< END OF PREVIEW >

Thanks for visiting! To see the other chain letter exercises, download the product file. Proceeds go to mathplane site maintenance and improvement (and, treats for Norway the Husky!). We appreciate your support.
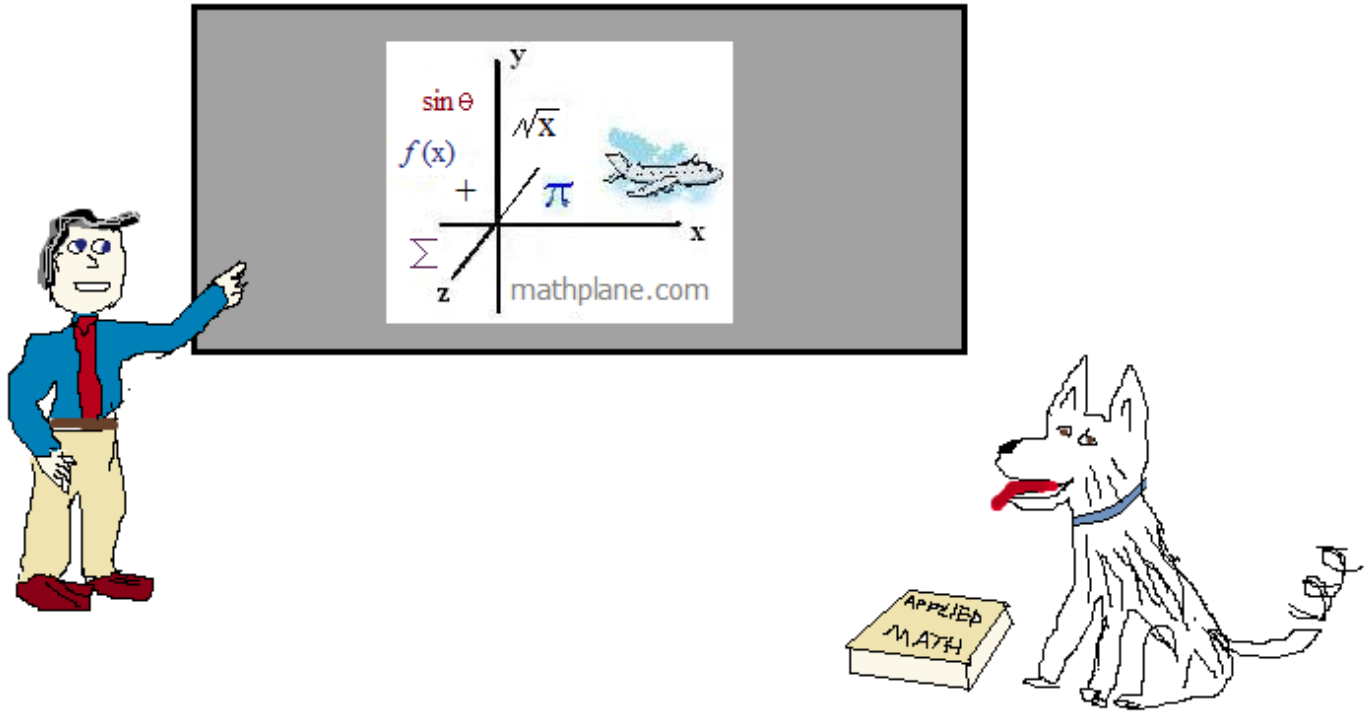
Also, Mathplane *Express* for mobile at mathplane.org