

# Using Marked Distances

Use marked distances as a way to control translations in your sketch.

©2009 Key Curriculum Press

Select any value that stands for a distance...

distance = 1.00 cm

Transform

Mark Center  
Mark Mirror  
Mark Angle  
Mark Ratio  
Mark Vector  
Mark Distance

and choose Transform | Mark Distance.

The distance value flashes.

distance = 1.00 cm

The value can be a measurement, parameter, or calculation.

Select an object to translate...

A

distance = 1.00 cm

Transform

Mark Center  
Mark Mirror  
Mark Angle  
Mark Ratio  
Mark Vector  
Mark Distance

and choose Transform | Translate.

Translate...

Translate

Enter an angle...

45

and click Translate.

Translate

Point A is translated by 1 cm. at the angle you entered.

A

A'

distance = 1.00 cm

If you change the value...

A

A'

distance = 2.00 cm

the translation changes.

You can also translate an object by selecting two distance values...

m  $\overline{EF}$  = 2.00 cm

m  $\overline{EG}$  = 1.86 cm

B

Transform

Mark Center  
Mark Mirror  
Mark Angle  
Mark Ratio  
Mark Vector  
Mark Distance

and choosing Transform | Mark Distance.

Select point B, choose Transform | Translate...

Translate

Translation Vector:  
☐ Polar ☒ Rectangular ☐ Marked

By:  
☐ Fixed Distance ☒ Marked Distance

At:  
☒ Fixed Angle ☐ Marked

Horizontal:  
☐ Fixed Distance ☒ Marked Distance

m  $\overline{EF}$

m  $\overline{EG}$

and click Translate.

Point B is translated horizontally 2.00 cm. and vertically 1.86 cm.

B

B'

m  $\overline{EF}$  = 2.00 cm

m  $\overline{EG}$  = 1.86 cm