Points / Lines / Planes

- point → tells location
  ⇒ name w/ dot & capital letter

EX→ •A point A (green)

point Q (green)
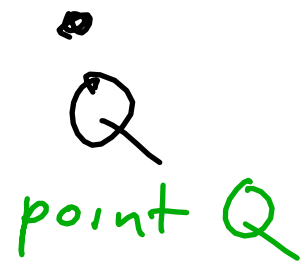
- line → infinite # of points
  ⇒ name w/ 2 points on line & double arrow above
    OR lower case letter

EX→ line d (green)
  OR
  $\overleftrightarrow{BC}$ OR $\overleftrightarrow{CB}$ (green)
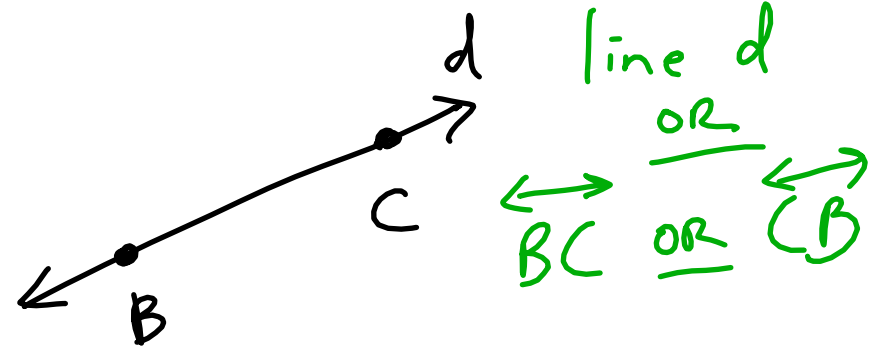
- plane → infinite # of lines, flat
  ⇒ name using 3 points not on same line OR capital letter

EX→

plane E (blue)

plane TIK (green)
plane KIT (green)
plane ITK (green)
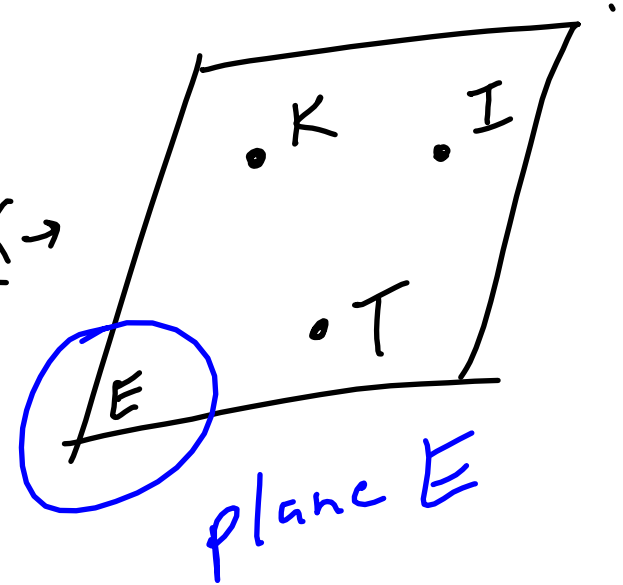
- line segment → 2 endpoints
  ⟹ name w/ bar above 2 endpoints

EX →

X ———————— Y
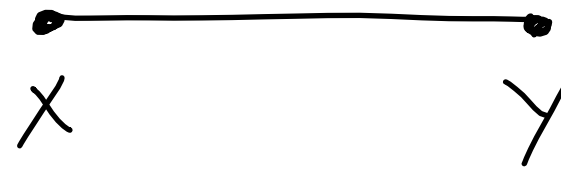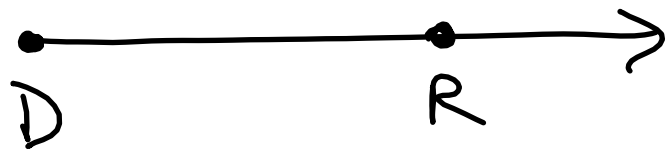
$\overline{XY}$ or $\overline{YX}$

- ray → 1 endpoint, all points on that side of line
  ⟹ name w/ endpoint + 1 other point w/ one-sided arrow above

EX →

D ———•——— R ———→

$\overrightarrow{DR}$

G
H
$\overrightarrow{GH}$

M A T H
$\overrightarrow{TM}$ & $\overrightarrow{TH}$
$\overrightarrow{AM}$ $\overrightarrow{AT}$
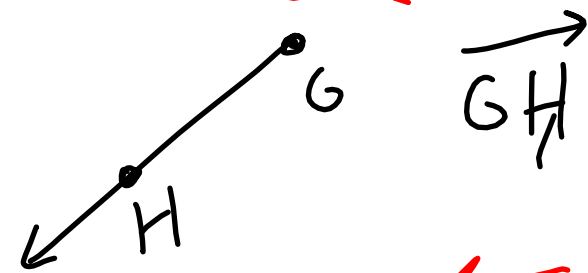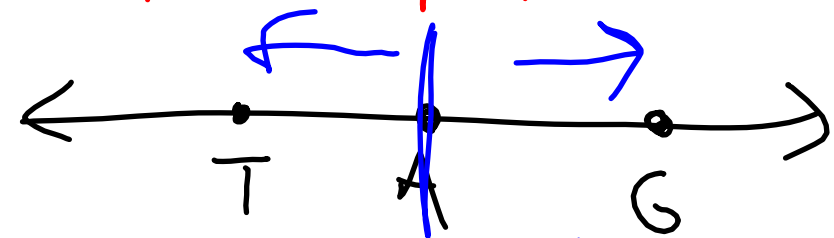
- opposite rays → 2 rays w/ same endpoint, makes line
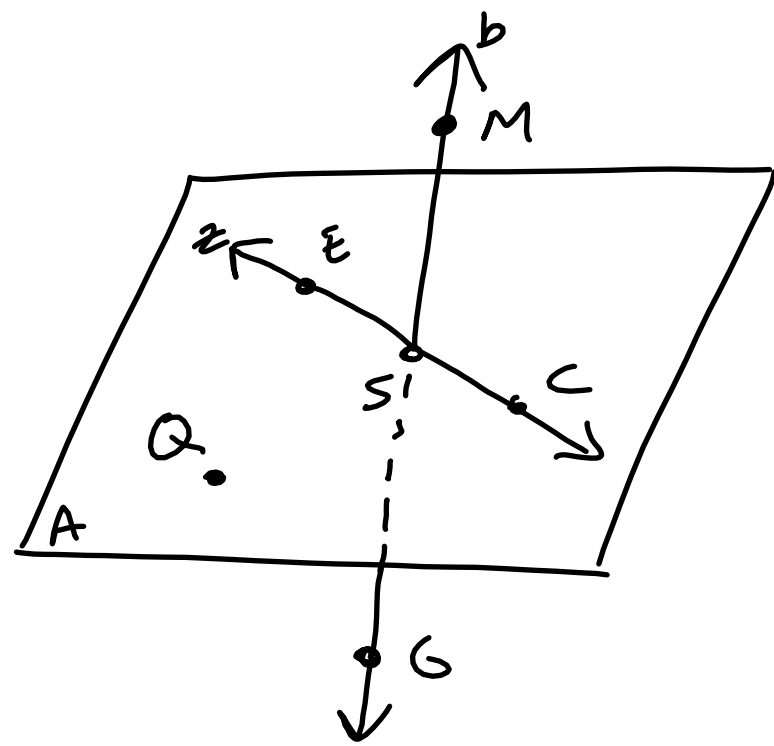 ⟹ name w/ endpoint + point on either side (2 rays)
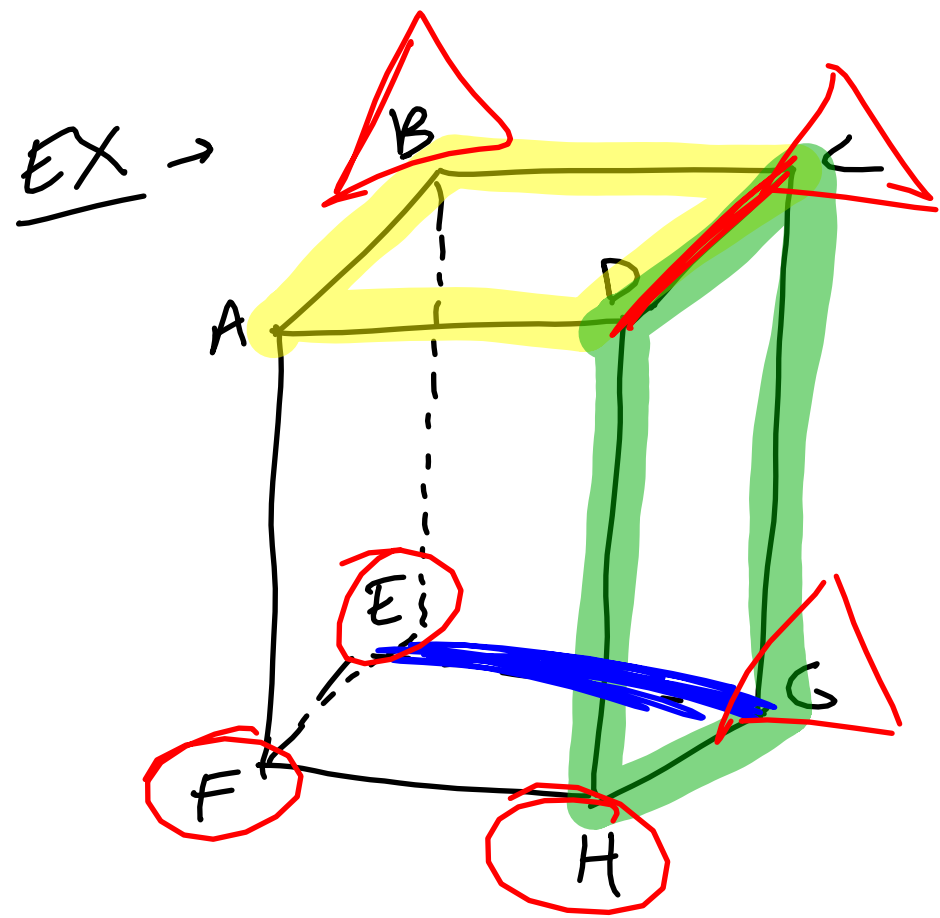
EX →

←——— T ——A—— G ———→

endpoint

$\overrightarrow{AT}$ + $\overrightarrow{AG}$
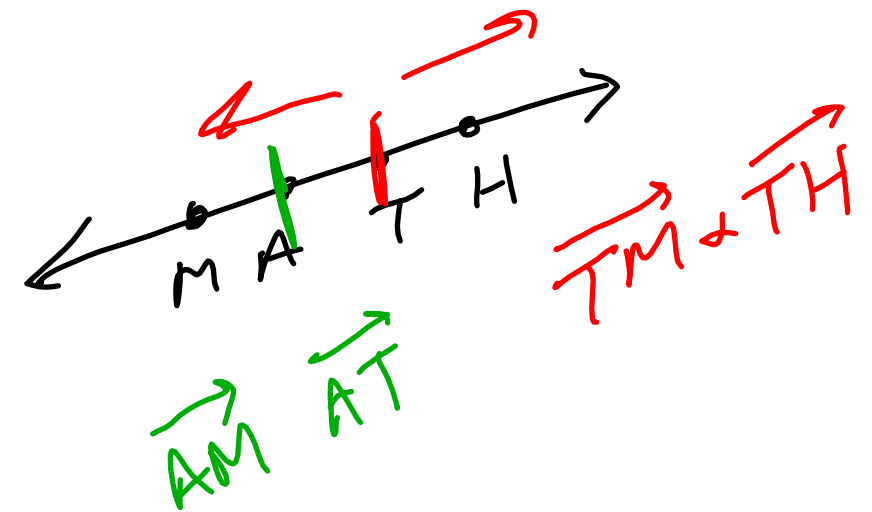
EX →

1) Another way to name plane A?
plane EQC, plane QEC, plane SEQ, plane SCQ

2) Two sets of opposite rays?
$\overrightarrow{SE}$ + $\overrightarrow{SC}$, $\overrightarrow{SM}$ + $\overrightarrow{SG}$

3) Another way to name $\overleftrightarrow{EC}$?
$\overleftrightarrow{CE}$, $\overleftrightarrow{ES}$, $\overleftrightarrow{SE}$, line z

EX →

1) planes ABC & DHG intersect?

$\overleftrightarrow{DC}$

2) what planes intersect @ $\overleftrightarrow{EG}$?

EFH & BCG

HW: p. 16 → 8-32, 65