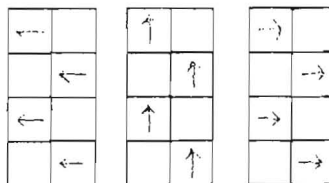


Sketch the next figure in the pattern.



Describe a pattern in the sequence of numbers. Predict the next number.

a) $2, -4, 8, -16, \dots$

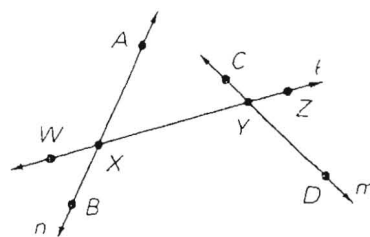
b) $\frac{5}{6}, \frac{4}{5}, \frac{3}{4}, \frac{2}{3}, \dots$

show the conjecture is false by finding a counterexample.

If $m \neq -1$, then $\frac{m}{m+1} > 1$.

Decide whether the statement is *true* or *false*.

- Point Y lies on line m .
- X, Y , and Z are collinear.
- Point W lies on line m .
- X, Y , and Z are coplanar.
- \overrightarrow{YW} and \overrightarrow{YD} are collinear.
- \overrightarrow{YW} and \overrightarrow{YD} are coplanar.
- \overrightarrow{YX} and \overrightarrow{YZ} are collinear.
- \overrightarrow{YX} and \overrightarrow{YZ} are coplanar.



Sketch the figure described,

Two rays that do not intersect.

A set of three lines that has two points of intersection

Draw a sketch of the three collinear points. Then write the Segment Addition Postulate for the points.

M is between P and R .

A is between B and C . D is between A and B . B is between D and E .

$EC = 32$, $EB = 11$, and $BD = DA = AC$. (draw a sketch to help)

a) Find DA

b) Find ED .

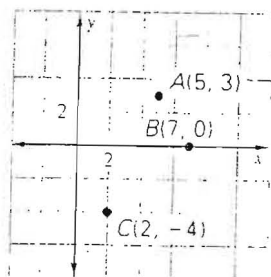
Suppose M is between X and Y . Use the Segment Addition Postulate to solve for x . Then find the length of each segment.

$$XM = 8x - 3$$

$$MY = 12x - 5$$

$$XY = 112$$

Using the graph below, find AB , BC , and AC .



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