

Cartesian Coordinate Cartoons

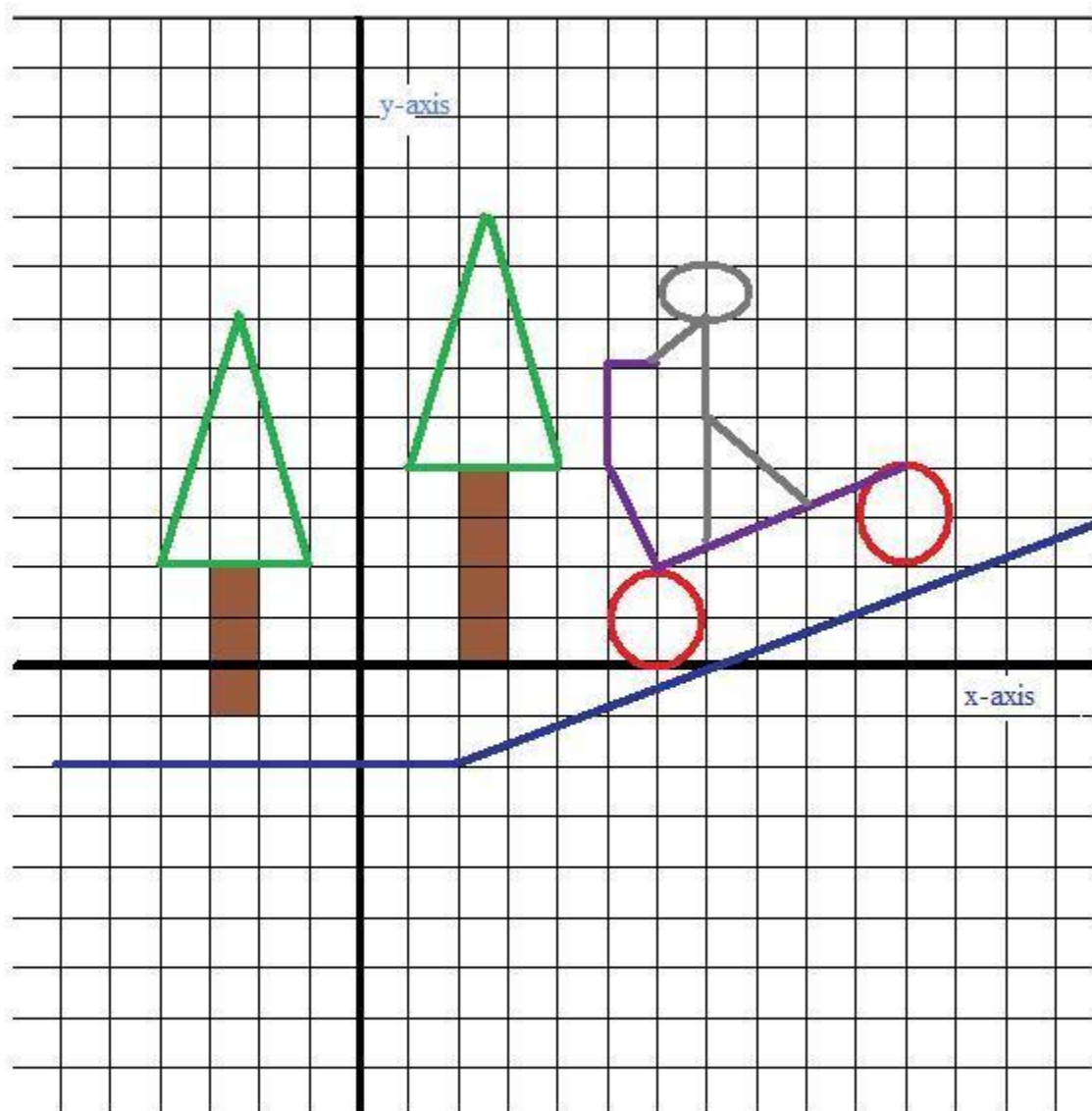
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Note: Each square is
(one unit) x (one unit)

"Why did the math student get lost?"

(Answer is with the solutions)

- 1) Draw a line segment connecting $(-6, -2)$ to $(2, -2)$
- 2) Draw a ray with endpoint $(2, -2)$ that has a slope of $2/5$
- 3) Construct a circle with diameter of 2 and the center $(6, 1)$
- 4) Construct a circle with radius of 1 and the center $(11, 3)$
- 5) Draw an isosceles triangle with base 3 and altitude of 5... The median of the base is $(2.5, 4)$
- 6) Reflect the image over the y-axis AND shift the triangle down 2 units
- 7) Shade in the following areas:
 (x, y) where $2 < x < 3$ and $0 < y < 4$
 and
 (x, y) where $-3 < x < -2$ and $-1 < y < 2$
- 8) Draw line segment #8 connecting $(6, 2)$ to $(11, 4)$
- 9) Draw a line segment perpendicular to line segment #8. The length is approximately $2\frac{1}{2}$ units and rises from $(6, 2)$
- 10) Draw a vertical line segment from $(5, 4)$ to $(5, 7)$
- 11) Draw a 1 unit horizontal segment from $(5, 7)$ to $(6, 7)$
- 12) Inscribe an ellipse in the region within these points: $(6, 7)$ $(6, 8)$ $(8, 7)$ $(8, 8)$
- 13) Draw vertical line segment #13 from $(7, 7)$ to line segment #8
- 14) From the midpoint of segment #13, draw a segment with slope -1 to segment #8 (this should form "an upside down 45 degree angle".)
- 15) Connect the right endpoint of segment #11 to the bottom of the ellipse.



Why did the math student get lost?

Because he used the wrong sign...
(traffic sign/math sign)

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