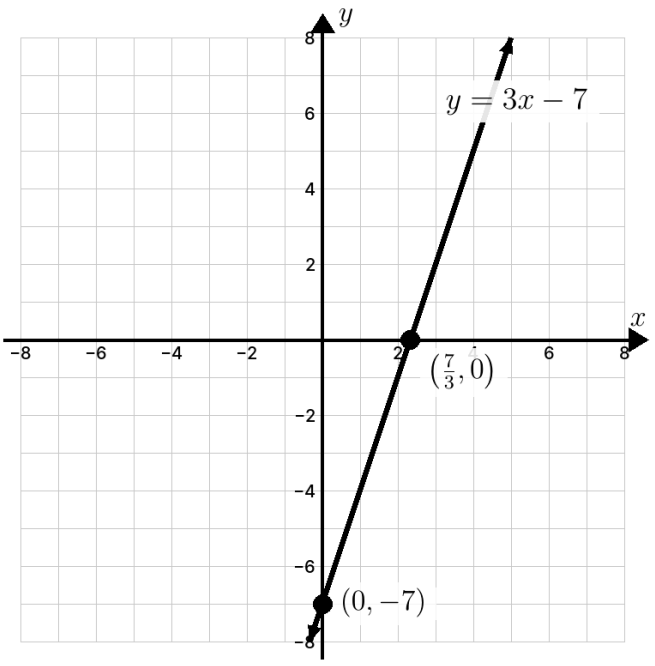
Where It Crosses

GL09-V1 · storyboard · GL09 Intercepts and slope-intercept form. Read each picture with its sentences.

Picture 1



Slope 3

$x = 0$: $(0, -7)$

$y = 0$: $3x = 7$, $\left(\frac{7}{3}, 0\right)$

1. Take y equals 3 x minus 7.
2. The slope is 3.
3. Put x equal to 0 for the y intercept, the point 0, negative 7.
4. Put y equal to 0 for the x intercept: 3 x equals 7, so the point 7 thirds, 0.

Picture 2

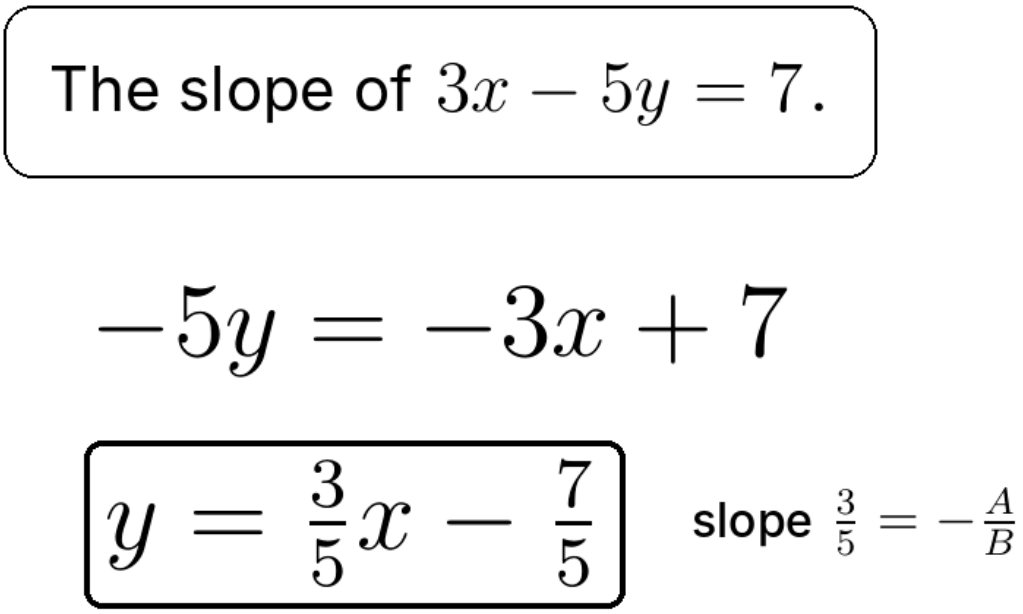
Trap $y = 2x + 3$

$\times$ x-intercept $(0, 3)$

✓ x-intercept $\left(-\frac{3}{2}, 0\right)$

5. Watch for the trap: swapping the intercepts.
6. On the x axis, y is 0: the x intercept of y equals 2 x plus 3 is negative 3 halves, 0.

Picture 3



7. What is the slope of 3 x minus 5 y equals 7?
8. Solve for y.
9. Take away 3 x: negative 5 y equals negative 3 x plus 7.
10. Divide by negative 5: y equals 3 fifths x minus 7 fifths.
11. The slope is 3 fifths: negative A over B.