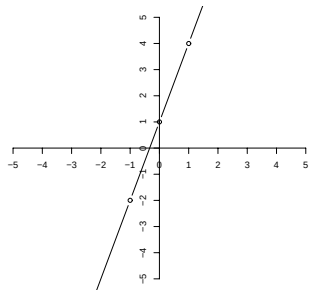
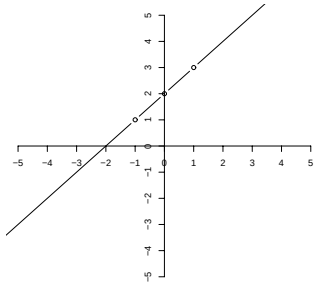
Solutions to Warmup 2

1. Graph the function $y = 3x + 1$



2. Graph the function $2y + 3 = x + y + 5$
$y + 3 = x + 5$
$y = x + 5 - 3$
$y = x + 2$



3. Find the slope of the line through (3,0) and (6,3)

$$\text{slope} = \frac{\Delta y}{\Delta x} = \frac{\text{“rise”}}{\text{“run”}} = \frac{y_2 - y_1}{x_2 - x_1} = \frac{3 - 0}{6 - 3} = \frac{3}{3} = 1$$

4. 15% of $80 = 0.15 \times 80 = 12$

5. $10 = 15\%$ of what number? $10 = 0.15\ x$, so $x = 66.67$

6. Convert 0.01725 to a percent: $0.01725 \times 100 = 1.725\%$

7. Match these equations with their graphs:
The first graph: y=x+2
The second graph: y=2-x

Describe these polynomials

8. This is a second-degree polynomial, also called a quadratic.

9. This is a third-degree polynomial, also called a cubic.

10. This is a first-degree polynomial, also called a line.