Algebra & Functions (Maths 201–016)

Answers

1. Equation solutions:
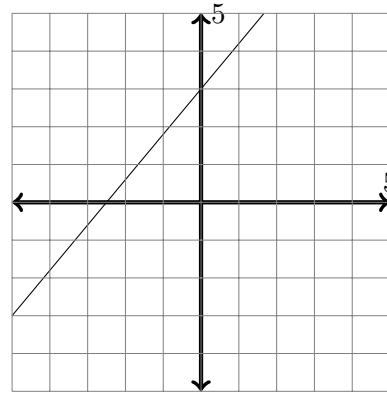   (a) 6/5   (b) 11/6   (c) 4

2. "Word problem" solutions:
   (a) $9000   (b) 25%   (c) $600   (d) 20%

3. $x + y = 6$

4. $y = -\frac{1}{5}x + 2$.

5. slope: $\frac{6}{5}$; intercepts: $x = -\frac{5}{2}$, $y = 3$. Graph at right:

6. The pairs of lines are:

   (a) neither; intersection: $(x, y) = (1, -1)$

   (b) perpendicular; intersection: $(x, y) = (2, 0)$

7. Simplified exponents:
   (a) $\dfrac{8b^9}{3a^{17}c}$ (b) $\dfrac{36z^{22}}{x^{12}y^{14}}$ (c) $\dfrac{v^{10}}{49w^{12}}$

For extra practice, sketch the pairs of lines above (in Q6).
Here are their graphs: