Sensible and Reasonable Math Phrases Handout-Answers (Otherwise Known As Rational Expressions Handout)

1. Simplify
$$\frac{6x}{3x^2+6x}$$
. $\frac{2}{x+2}$

6. Multiply
$$\frac{a-1}{a^2-9}$$
 by $\frac{a^2-4a+3}{a^2-1}$. $\frac{a-1}{(a+3)(a+1)}$

2. Simplify
$$\frac{5x+10}{x^2+7x+10}$$
.

7. Divide
$$\frac{x^3}{x-1} \div \frac{x^2}{x-1}$$
.

3. Add
$$\frac{4}{x+4} + \frac{5}{x+5}$$
. $\frac{9x+40}{(x+4)(x+5)}$

8. Divide
$$\frac{x^2-2x+1}{x^2+x-2} \div \frac{x^2-1}{x^2-x-6}$$
.

4. Subtract
$$\frac{1}{x} - \frac{1}{x-1}$$
.

9. Simplify
$$\frac{\frac{y^4}{y^4-1}}{\frac{y^3}{y^2-1}}$$
.

5. Multiply
$$\frac{b^2}{b-1}$$
 by $\frac{b^2-1}{b^3+b^2}$.

10. Simplify
$$\frac{\frac{b^2 - 1}{b^2 + 5b + 6}}{\frac{2b^2 - 2b}{2b^2 + 6b}}$$
.

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