

MAT 1033
WORKSHEET # 2
SECTION 6.3

Simplify each rational expression by method of your choice. Show all your work.

1. $\frac{3a^{-1} + 3b^{-1}}{4a^{-2} - 9b^{-2}}$

2. $\frac{5a^{-1} - 2b^{-1}}{25a^{-2} - 4b^{-2}}$

3. $\frac{5x^{-1} + 1}{1 - 25x^{-2}}$

4. $\frac{p^{-1} - q^{-1}}{(pq)^{-1}}$

5. $\frac{x^{-2} + x^{-1}}{x^{-2} - x^{-1}}$

6. $\frac{2x^{-2} - (2x)^{-1}}{(2x)^{-2} - x^{-1}}$

ANSWERS:

1. $\frac{3ab(b+a)}{(2b+3a)(2b-3a)}$

2. $\frac{ab}{5b+2a}$

3. $\frac{x}{x-5}$

4. $q - p$

5. $\frac{1+x}{1-x}$

6. $\frac{8-2x}{1-4x}$