

Simplifying Rational Expressions

Simplify the following rational expressions completely.

1. $\frac{3m}{6m}$

2. $\frac{12ab^2}{15a^2}$

3. $\frac{(c+2)(c-1)}{c+2}$

4. $\frac{r^2(r+3)}{r(r-3)}$

5. $\frac{10v+40}{8v+32}$

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

7. $\frac{d^2+6d+8}{d^2-d-20}$

8. $\frac{h^2-9}{h^2+6h+9}$

9. $\frac{f^2+2f-8}{2f^2-8}$

10. $\frac{m+2}{m^2+8}$

11. $\frac{j^2+7j+6}{12j^3-14j^2-10j}$

12. $\frac{2y^2+9y-18}{4y^2-6y}$