

12-3c Simplifying Rational Expressions

Name _____

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Simplify each rational expression, if possible.

17. $\frac{2n - 16}{64 - n^2}$

18. $\frac{8 - 4x}{2x^2 - 12x + 16}$

Simplify each rational expression, if possible.

32. $\frac{q - 6}{q^2 - 9q + 18}$

33. $\frac{z^2 - 2z + 1}{z^2 - 1}$

34. $\frac{t - 3}{t^2 - 5t + 6}$

35. $\frac{p^2 - 6p - 7}{p^2 - 4p - 5}$

36. $\frac{x^2 - 1}{x^2 + 4x + 3}$

37. $\frac{2x - 4}{x^2 - 6x + 8}$

Simplify each rational expression, if possible.

43. $\frac{p^2 + 12p + 36}{12p + 72}$

45. $\frac{a}{2a + a}$

46. $\frac{j - 5}{j^2 - 25}$

48. $\frac{n^2 - n - 56}{n^2 - 16n + 64}$

49. $\frac{(x + 1)^2}{x^2 + 2x + 1}$