

Algebra

Activity 1e - Adding and Subtracting Fractions

1. (a) Add $\frac{2}{7} + \frac{4}{7}$
(b) Add $\frac{2}{x} + \frac{4}{x}$
(c) Add $\frac{2}{(x+2)} - \frac{4}{(x+2)}$
(d) Add $\frac{2}{(x^2+2)} - \frac{4-x}{(x^2+2)}$
(e) Describe how to add two fractions that have common denominators.
(f) On parts (c) and (d), the instructions are to 'add', but the fractions are subtracted. Why is this not a typo?
2. (a) Add $2 + \frac{4}{7}$
(b) Add $2 + \frac{4}{x}$
(c) Add $x - \frac{4}{(x+2)}$
(d) Describe how to add an integer to a fraction.
3. Add
(a) $\frac{2}{3} + \frac{1}{6}$
(b) $\frac{4}{7} + \frac{3}{5}$
(c) $\frac{3}{10} + \frac{4}{15}$
(d) Describe the process to add two fractions (be specific when you are discussing finding a common denominator)
4. Add
(a) $\frac{a}{b} + \frac{c}{d}$
(b) $\frac{3}{(x+2)} + \frac{x}{(x+2)(x-4)}$
(c) $\frac{2}{(x+2)} - \frac{4}{(x-4)}$
(d) $\frac{x+1}{(x+2)(x-5)} - \frac{2}{(x-4)(x+2)}$
(e) $\frac{x+1}{x^2-3x-10} - \frac{2}{x^2-2x-8}$