

Adding and Subtracting Rational Expressions (Section 6.4)

You must have a common denominator before adding or subtracting. After adding or subtracting, don't forget to simplify.

1) Add and simplify. First, find a common denominator: $\frac{x+y}{2x^2y} + \frac{2x-y}{xy^2}$

2) Subtract and simplify. First, find a common denominator: $\frac{2}{x+5} - \frac{3}{2x}$

Rational Equations (Section 6.6)

3) Solve. $\frac{3}{4x} + \frac{5}{x} = 1$

Word Problems with Rational Equations (Section 6.7)

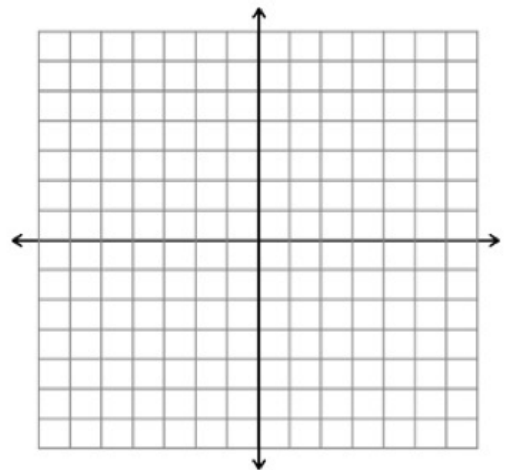
Set up a proportion to solve. Identify your answer with an appropriate label or unit.

- 4) To estimate the seal population, scientists tagged 33 seals. Several days later, they collected a sample of 40 seals, and 24 of them were tagged. Estimate the seal population.

Solving Systems of Equations by Graphing (Section 7.1)

Solve the system of equations by graphing each line. Make sure you identify the solution.

5) $y = -3x + 1$
 $x + y = 3$



Systems of Equations (Section 7.2)

You must be able to solve systems of equations using each method. On the exam, a specific method will be specified for some problems. So practice both substitution and elimination.

6) Solve using substitution:

$$\begin{aligned} y &= -4x - 2 \\ 2x + y &= 2 \end{aligned}$$