Practice 2, 3, & 5

Lesson 6.3: Solving Equations Involving Fractions

1. Solve each equation.

a) $\frac{t}{4} = 7$ **b)** $-48 = 8x$ *c*) $9x = 54$ **d)** $\frac{k}{-2} = -11$

2.Solve a) $6x - 7 = -19$ b) $-7x - 8 = 13$

3. One-quarter of the chicken pieces in the dish are wings. There are 7 wings. How many chicken pieces are in the dish?

a) Write an equation you can use to solve the problem. **b)** Solve the equation.

4. Solve each equation.

a) $\frac{n}{3} - 2 = 10$ **b)** $4 - \frac{p}{5} = 13$ **c)** $\frac{t}{-9} + 8 = -5$

5. For each sentence, write an equation. Solve the equation to find the number.

a) A number divided by –4 is 7.

b) Add 4 to a number divided by –3 and the sum is –2.

c) Subtract a number divided by 6 from 1 and the difference is 5.

6. Check this student's work. Rewrite a correct and complete algebraic solution if necessary.

$$\frac{t}{-6} - 24 = -6$$

$$\frac{t}{-6} - 24 + 24 = -6 + 24$$

$$\frac{t}{-6} = 18$$

$$t = -3$$

Lesson 6.5: Solving Equations Involving the Distributive Property

1. Solve each equation using the distributive property.
Verify the solution.

a) $5(a + 2) = -5$ **b)** $4(p - 6) = -4$ **c)** $-9(d - 3) = -45$

3. At the fair, 5 friends each bought an $8 meal voucher and one ice-cream voucher.
The total cost of the vouchers was $55.What was the price of an ice-cream voucher?

a) Choose a variable to represent the price of an ice-cream voucher.

b) Write and solve the equation

6. Solve each equation. **a)** $-7(a + 3) = -14$ **b)** $-5(7 - r + 11) = 10$