Extra Practice 3

Lesson 6.3: Solving Equations Involving Fractions

1. Solve each equation. Verify the solution.

    a) $\dfrac{t}{4} = 7$ **b)** $\dfrac{a}{3} = 9$

    c) $\dfrac{b}{7} = 11$ **d)** $\dfrac{c}{6} = 12$

2. Solve each equation. Verify the solution.

    a) $\dfrac{d}{5} = -8$ **b)** $\dfrac{f}{-6} = 10$

    c) $\dfrac{k}{-2} = -11$ **d)** $\dfrac{q}{3} = -12$

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.

    c) Verify the solution.

4. Solve each equation.
    Verify the solution.

    a) $\dfrac{n}{3} - 2 = 10$ **b)** $4 - \dfrac{p}{5} = 13$

    c) $\dfrac{t}{-9} + 8 = -5$ **d)** $-17 + \dfrac{n}{-3} = 9$

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.

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

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

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

    $$t = -3$$