Practice 3.2

Tell whether each equation has one solution, no solution, or an infinite number of solutions. Justify your answer.

1. $2x - \frac{1}{4} = -\frac{1}{8}(16x - 2)$

2. $0.5(6x - 3) = \frac{1}{2}(6 + 6x)$

3. $\frac{1}{5}(x - 5) = \frac{1}{5}x - 1$

4. Which step is the first *incorrect* step in the solution shown below

Solve: $6(x + 1) = -5x + 14$

Step 1: $6x + 6 = -5x + 14$
Step 2: $11x + 6 = 14$
Step 3: $11x = 8$
Step 4: $x = -3$

A) Step 1

B) Step 2

C) Step 3

D) Step 4

Express each decimal as a fraction. Show your work.

$0.0\overline{6}$

Practice 3.2

Tell whether each equation has one solution, no solution, or an infinite number of solutions. Justify your answer.

1 $2x - \frac{1}{4} = -\frac{1}{8}(16x - 2)$

One solution, $x = \frac{1}{8}$

2 $0.5(6x - 3) = \frac{1}{2}(6 + 6x)$

No solution

3 $\frac{1}{5}(x - 5) = \frac{1}{5}x - 1$

Infinite solutions

4 Which step is the first *incorrect* step in the solution shown below?

Solve: $6(x + 1) = -5x + 14$

Step 1: $6x + 6 = -5x + 14$
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A) Step 1
B) Step 2
C) Step 3
✔ D) Step 4

Express each decimal as a fraction. Show your work.

$0.0\overline{6}$

$\frac{1}{15}$