

## 10-21 Quiz Review

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each proportion.**

1)  $\frac{m}{7} = \frac{7}{3}$

2)  $\frac{x}{3} = \frac{8}{6}$

3)  $\frac{3}{5} = \frac{8}{x+8}$

4)  $\frac{9}{5} = \frac{8}{n+3}$

5)  $\frac{x+3}{x} = \frac{6}{7}$

6)  $\frac{x}{x+5} = \frac{8}{5}$

**Solve each problem.**

7) 41 is what percent of 156?

8) What percent of 154 is 63?

9) 46% of 123 is what?

10) 37% of 152 is what?

11) 75 is 40% of what?

12) 135 is 59% of what?

**Find each percent change. State if it is an increase or a decrease.**

13) From 51 to 1

14) From 77 to 96

15) From 27 to 28.2

16) From 89 to 24

17) From 8 to 33

18) From 32.8 to 80

**Solve each equation algebraically or graphically.**

19)  $-31 - 5n = -(n - 1) + 4n$

20)  $-3(2n + 5) = -15 - 6n$

21)  $-38 - 4x = -7(-2x + 8)$

22)  $-8 + 8(p + 5) = 8p + 24$

23)  $-(6p - 2) = 2 - 6p$

24)  $8 - 4k = -3(k - 1)$

## Answers to 10-21 Quiz Review (ID: 1)

- |                                    |                     |                   |                  |
|------------------------------------|---------------------|-------------------|------------------|
| 1) $\{16.33\}$                     | 2) $\{4\}$          | 3) $\{5.33\}$     | 4) $\{1.44\}$    |
| 5) $\{-21\}$                       | 6) $\{-13.33\}$     | 7) 26.3%          | 8) 40.9%         |
| 9) 56.6                            | 10) 56.2            | 11) 187.5         | 12) 228.8        |
| 13) 98% decrease                   | 14) 24.7% increase  | 15) 4.4% increase | 16) 73% decrease |
| 17) 312.5% increase                | 18) 143.9% increase | 19) $\{-4\}$      |                  |
| 20) $\{\text{All real numbers.}\}$ | 21) $\{1\}$         | 22) No solution.  |                  |
| 23) $\{\text{All real numbers.}\}$ | 24) $\{5\}$         |                   |                  |