CHAPTER 3 Test

1. List at least two methods you can use to compare fractions with unlike denominators. cross products and number lines
2. Describe the process of finding the mean, median, mode, and range of a set of data. mean: sum ÷ # ; median: middle of order ; mode: most often ; range: largest minus smallest

Replace each ● with <, >, or = to make a true sentence.

3. $-4 < -3$
4. $-1.01 > -1.1$
5. $\frac{3}{5} > \frac{8}{15}$
6. Write $-\frac{1}{2}$, $-\frac{2}{9}$, and $-\frac{3}{8}$ in order from least to greatest. $-\frac{1}{2}, -\frac{3}{8}, -\frac{2}{9}$

Find each sum or difference.

7. $-4.0 - 2.8$ -6.8
8. $0.32 - (-0.45)$ 0.77
9. $6.1 + (-3.2)$ $+2.9$
10. $\frac{7}{10} + \left(-\frac{3}{10}\right)$ $\frac{2}{5}$
11. $\frac{1}{5} - \left(-\frac{3}{4}\right)$ $\frac{19}{20}$
12. $\frac{3}{8} + 2\frac{1}{2}$ $2\frac{7}{8}$
13. **Finance** Sally recorded the amount of money she spent on lunch for five school days in the table at the right.
    a. Find Sally's mean, median, mode, and range of lunch money. \$1.95, \$1.50, \$0.99, \$3.00
    b. Explain which measure of central tendency is the least useful in describing Sally's lunch costs. mode since it is much smaller than the mean and median

Day	Cost
Monday	\$0.99
Tuesday	\$1.50
Wednesday	\$3.99
Thursday	\$0.99
Friday	\$2.28

Solve each equation.

14. $10 \div 2 + 6 = x$ $x = 11$
15. $8(0.3) - 0.5 = y$ $y = 1.9$
16. $a = \frac{2 \cdot 6 + 4}{8 \div 2}$ $A = 4$

Solve each equation. Use algebra tiles if necessary.

17. $g + 7 = 2$ $g = -5$
18. $-6 + h = -1$ $h = +5$

Solve each equation. Check your solution.

19. $a - (-76) = 44$ $A = -32$
20. $5.2 + f = 16.4$ $f = 11.2$
21. $\frac{1}{2} = b - \frac{7}{8}$ $b = 1\frac{3}{8}$
22. $3 + |c| = 6$ $c = -3$ or $c = +3$
23. $|m - 4| = 1$ $m = -3$ or $m = +5$
24. $-12 = |t - (-7)|$ $\varnothing$
25. Taryn visited the "Guess Your Age" booth at the state fair. If the person in the booth could not guess Taryn's age within three years, Taryn would win a stuffed animal. Taryn is 16 years old. Write and solve an equation that can be used to find the person's greatest and least guesses, without Taryn's winning a prize.

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$|t - 16| = 3$

$t = 13$ or $t = 19$

A guess between 13 and 19 (including 13 and 19) would prevent Taryn from winning a prize.