Math 7 Mastery Test #2 Review

1. Graph the integer -9 and its opposite on a number line.

2. Use a number line to find the absolute value.
   $|2|$

3. The table shows the change in four companies' stock prices at the end of a day's trading. Which company's stock lost the most?

Company	Change in Price
King	-4
Farley	4
Allendale	8
Tellers	-1

4. Find the sum $39 + (-33)$.

5. Evaluate $a + b$ for $a = 40$ and $b = 17$.

6. The income from the Spanish Club's bake sale was $265. Expenses for the sale totaled $40. Use integer addition to find the total profit or loss from the bake sale.
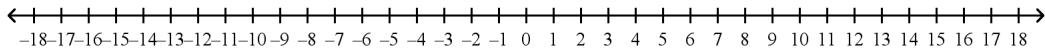
7. Find the difference $-13 - (-40)$.

8. Evaluate $p - q$ for $p = 16$ and $q = -24$.

9. Use a number line to find the product $2(-4)$.

$$\xleftarrow{\hspace{0.5em}\overset{\displaystyle}{\rule{0pt}{0pt}}\hspace{0.5em}}\underset{\substack{-18\,-17\,-16\,-15\,-14\,-13\,-12\,-11\,-10\,-9\;-8\;-7\;-6\;-5\;-4\;-3\;-2\;-1\;\;0\;\;1\;\;2\;\;3\;\;4\;\;5\;\;6\;\;7\;\;8\;\;9\;\;10\;11\;12\;13\;14\;15\;16\;17\;18}}{\rule{26em}{0.4pt}}\xrightarrow{\hspace{0.5em}}$$

10. Find the product $8 \cdot (-6)$.

11. Find the quotient $8 \div (-2)$.

12. Solve the equation $w - 15 = -10$. Check your answer.

13. Solve the equation $\dfrac{c}{2} = -6$. Check your answer.

14. Write the fraction $\frac{42}{50}$ as a decimal. If necessary, round your answer to the nearest hundredth.

15. Write the decimal 0.46 as a fraction in simplest form.

16. Compare the fractions $\frac{6}{10}$ $\underline{?}$ $\frac{-2}{6}$. Write $<$ or $>$.

17. Compare the decimals 0.55 __?_ 0.86. Write < or >.

18. Herlinda earns money by caring for turtles while people are on vacation. Herlinda earns $30 per week per pet. The table shows the number of turtles cared for per week during July. Simplify the expression $(8 + 4 \times 3) \times 30$ to find out how much Herlinda earned for the month of July.

Week	Pets
Week 1	8
Week 2	4
Week 3	4
Week 4	4

19. Use the Distributive Property to find $7(99)$.

20. Evaluate $x - 4$ for $x = 40$.

21. Evaluate $3x + 5$ for $x = 3$.

22. Evaluate $\dfrac{3}{n} + 3m$ for $n = 3$ and $m = 7$.

23. Simplify $30 - 16 \div 2$.

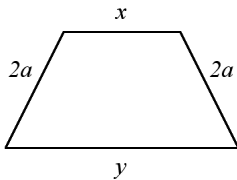24. Tell which property is represented. $266 \times 1 = 266$.

25. Tell which property is represented. $9 \times (5 \times 2) = (9 \times 5) \times 2$.

26. Simplify $12 + 3\left(18 - 4^2\right) + 9$.

27. Write an expression for the perimeter of the trapezoid. Then, simplify the expression.

28. Identify like terms in the list: $5.6q; 6a^3; 4q; 3t; z^3; a; 3a^3; \frac{4}{11}r; \frac{q}{2}; 7r$.
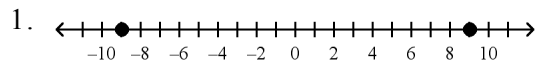
29. It takes 60 days to create a custom motorcycle. Write an algebraic expression to describe the number of days it takes to create *n* custom motorcycles. How many days will it take to create 10 custom motorcycles?

30. A fence has a total of 500 planks. Olivia paints *p* planks each day. Write an algebraic expression for how many days it will take Olivia to finish painting the fence.

31. Write the phrase as an algebraic expression.
    5 times the sum of a number and 21

Math 7 Mastery Test #2 Review
Answer Section

SHORT ANSWER

1.

2. 2
3. King
4. 6
5. 57
6. profit of $225
7. 27
8. 40
9. -8
10. -48
11. -4
12. $w = 5$
13. $c = -12$
14. 0.84
15. $\frac{23}{50}$
16. $>$
17. $<$
18. $600
19. 693
20. 36
21. 14
22. 22
23. 22
24. Identity Property
25. Associative Property
26. 27
27. $2a + x + 2a + y;\ 4a + x + y$
28. $5.6q, \frac{q}{2}, \text{and } 4q;\ 6a^3 \text{ and } 3a^3;\ \frac{4}{11}r \text{ and } 7r$
29. $60n;\ 600$ days
30. $\dfrac{500}{p}$
31. $5(z + 21)$