

UNIT Numbers and Expressions**Unit Test: B**

- Which measurement has 3 significant digits?
A 340 in. C 3.42 in.
B 232.0 in. D 0.04 in.
- Clinton's garden is 32.55 m long and 12.50 m wide. What is the perimeter of Clinton's garden written with the correct number of significant digits?
A 90.6 m C 406.9 m
B 90.10 m D 407 m
- A water bottle contains 1.5 liters of water. Approximately how many gallons of water does the bottle contain?
A 0.39 gal C 1.8 gal
B 1.2 gal D 5.8 gal
- $196^{\frac{1}{2}}$ is equal to which of the following?
A 11 C 13
B 12 D 14
- The equation $s = 12t^{\frac{2}{5}}$ represents the value of a share of Computer Solutions' stock where t is the number of months the stock has been sold. What is the price of the stock after 243 months?
A \$24.32 C \$108.00
B \$36.00 D \$583.20
- In which set does -3.5 belong?
A Whole numbers
B Integers
C Rational numbers
D Irrational numbers
- Which statement shows that the set of irrational numbers is **not** closed by division?
A $\frac{7}{14} = \frac{1}{2}$ C $\frac{\pi}{1} = \pi$
B $\frac{\sqrt{2}}{\sqrt{2}} = 1$ D $\frac{4}{2\sqrt{3}} = \frac{2}{\sqrt{3}}$
- What is $(z-3)^2 + 5$ evaluated for $z = -2$?
A -6 C 12
B 6 D 30
- What is $xy - 12x^2$ evaluated for $x = -2$ and $y = -6$?
A -60 C 36
B -36 D 60
- $3x - 6 + 5 + 17x$ is equivalent to which of the following expressions?
A $20x + 1$ C $19x$
B 19 D $20x - 1$

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13. The driving distance from Jacksonville to Tampa is 199 miles. Find the distance from Jacksonville to Tampa in kilometers.

14. Darryl in-line skated 2.75 kilometers in 90 minutes. Find Darryl's speed in miles per hour.

- 15.



The diagram shows an aerial view of a store. What is the area of Allen's store in square meters?

17. Simplify the expression $16^{\frac{3}{4}} \times 10,000^{\frac{1}{2}}$.

19. Is the set $\{-3, 0, 3\}$ closed under addition, subtraction, multiplication, or division? Explain your answer.

20. Find $-10z + 2y \div z$ evaluated for $z = -2$ and $y = 6$.

For 21–22, use the table.

Pearlie's Produce	
Onions	\$0.96 per lb
Squash	\$0.79 per lb
Potatoes	\$0.45 per lb
Corn	\$0.75 each

21. Allie bought 5 pounds of onions, x pounds of squash, and y pieces of corn. Write an expression that represents the amount Allie spent on produce.

Answer Key

Unit 1A Test: B

1. C
2. 90.10 m
3. A
4. D

6. \$108.00
7. A No B No C Yes D Yes

8. B
9. 30
10. -36
11. A No B No

13. 320 km
14. $1.14 \frac{\text{mi}}{\text{h}}$
15. approximately 899.3 m²

17. 800

19. The set is not closed under any operation, since the product, quotient, and sum of -3 and -3 is not included in the set, for example, and neither is the difference of -3 and 3.
20. 14
21. $\$4.80 + \$0.79x + \$0.75y$