

UNIT 1 Review

Write three number sentences that fit each pattern.

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
1. $n \div n = 1$	$x + y = y + x$	$2x = x + x$	$7 + a = b$
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

List three numbers that belong to each of the following sets.

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
2. whole numbers	natural numbers	integers	rational numbers
_____	_____	_____	_____

Find the absolute value of each number.

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
3. $ -7 =$ _____	$ 46 =$ _____	$ 68 =$ _____	$ -112 =$ _____

Write the numbers in order from least to greatest.

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
4. 8, 0, -4	-7, 8, -20	0, -4, 7	-2, -9, -6

Simplify.

<i>a</i>	<i>b</i>	<i>c</i>
5. $24 \div (9 - 5) \times 4$	$12 \times 3 \div (8 + 4) - 3$	$50 + (36 \div 9 + 22)$

Write an algebraic expression for each verbal expression.

<i>a</i>	<i>b</i>
6. 9 more than b	x decreased by 10
7. the product of 9 and k	r divided by 2

Evaluate each expression.

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
8. $(5 + 2) \times 12$	$2 \cdot 12 + 11$	$\frac{20 - 3(4)}{2}$	$\frac{16 + 47}{4 + 5}$

UNIT 1 Review

Evaluate each expression if $a = 6$, $b = 10$, and $c = 3$.

a	b	c	d
9. $a + b$	ab	$(c + 2)b$	$\frac{7c - 1}{2b}$

Solve.

a	b	c	d
10. $11(9) = w$	$a = \frac{1}{2}(15 + 3)$	$f = 4(4) + 3(10)$	$\frac{15 + 13}{12 - 5} = b$
Solution _____	Solution _____	Solution _____	Solution _____
11. $8k = 40$	$x + 23 = 79$	$19 + m = 100$	$4x = 10$
Solution _____	Solution _____	Solution _____	Solution _____

Solve.

12. Using the formula $A = lw$, find l when A is 48 square feet and w is 8 feet.

Answer _____

13. Using the formula $C = \pi d$, find C when d is 14 yards.

Answer _____

14. Using the formula $V = lwh$, find V when l is 15 meters, w is 12 meters, and h is 10 meters.

Answer _____

15. Using the formula $V = \pi r^2 h$, find V when r is 3 centimeters and h is 10 centimeters.

Answer _____

16. Using the formula $I = prt$, find I when p is \$500, r is $4\frac{1}{2}\%$, and t is 2 years.

Answer _____

17. Use the formula $C = (F - 32) \cdot \frac{5}{9}$ to find C when F is 113° .

Answer _____

UNIT 2 Review

Write the opposite of each integer.

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
1. 8	-13	-1	75

Add, subtract, multiply, or divide.

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>
2. $-10 + (-20) =$	$13 + 8 =$	$-25 + 42 =$	$-87 + (-4) =$
3. $20 - 17 =$	$11 - 23 =$	$-5 - (-3) =$	$-9 - 2 =$
4. $8(-6) =$	$(-4)(-22) =$	$\frac{-75}{-5} =$	$\frac{-63}{9} =$

Simplify.

5. $8k + k =$	$12m - 3m =$	$7ab - 10ab =$	$10n + (-3n) =$
6. $5y + 2z - y =$	$-2b + 4c + 3b =$	$-t + 2t - 8t =$	$5jk - (-8jk) + jk =$
7. $-3(17q) =$	$-7(-26st) =$	$(-8x)(9y) =$	$(-5k)(2.4y) =$
8. $\frac{15x}{5} =$	$\frac{-25rs}{-5} =$	$\frac{54y}{-6} =$	$\frac{105mn}{-3} =$
9. $9(r - 3) =$	$w(4 + 6m) =$	$-4(16p + 8) =$	$a(-32c - 6d) =$
10. $\frac{21x}{4} \cdot \frac{2y}{3} =$	$\frac{-30rs}{-6} \cdot \frac{p}{5} =$	$\frac{4y}{-6} \cdot \frac{s}{4} =$	$\frac{10m}{-3} \cdot \frac{n}{2} =$

Simplify the following expressions.

<i>a</i>	<i>b</i>	<i>c</i>
11. $k + 7 - (2k + 5) =$	$r + 2 - 3(5 - 2r) =$	$2(3a + 5b) + 3(5a - 3b) =$
12. $\frac{a}{2} + b + \frac{a}{2} =$	$\frac{3}{4}(-12x + 20) =$	$\frac{42b + 70}{7} =$