

Gateway Practice Test 1. Do not write on this test.

- Which of the following represents
"-6 divided by the product of p and q "
[A] $\frac{6}{pq}$ [B] $-\frac{pq}{6}$ [C] $\frac{6p}{q}$ [D] $-\frac{6}{pq}$
- Which of the following represents
" e subtracted from the product of 3 and f "
[A] $3f - e$ [B] $3(f - e)$
[C] $e - 3f$ [D] $(e - 3)f$
- Which of the following represents
"twice what Thelma's age will be 2 years from now"
[A] $2(x - 2)$ [B] $2(x + 2)$
[C] $2x - 2$ [D] $2x + 2$
- Which of the following represents
"the price of a dress was first tripled and then reduced by \$7"
[A] $3x - 7$ [B] $3(7 - x)$
[C] $7 - 3x$ [D] $3(x - 7)$
- Which of the following represents
"-4 times the sum of v and w "
[A] $-4(v + w)$ [B] $(-4)v + w$
[C] $-4v + w$ [D] $-4(vw)$
- Which of the following represents
"2 times what Wade's age was 6 years ago"
[A] $2x - 6$ [B] $2x + 6$
[C] $2(x - 6)$ [D] $2(x + 6)$
- Which of the following represents
"the balance in a checking account after a deposit of \$23 and a withdrawal of \$3"
[A] $x + 23 - 3$ [B] $x + 3 - 23$
[C] $x - (23 + 3)$ [D] $x - 3 - 23$

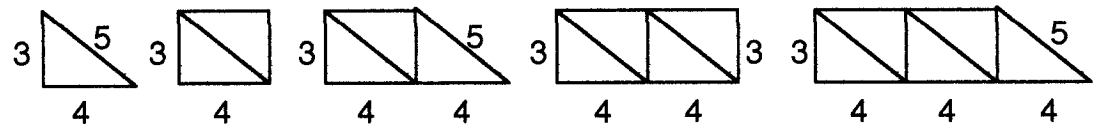
- Write the numbers in order from least to greatest. $\frac{4}{7}, \frac{2}{3}, 0.619048$
[A] $0.619048, \frac{2}{3}, \frac{4}{7}$ [B] $\frac{4}{7}, 0.619048, \frac{2}{3}$
[C] $0.619048, \frac{4}{7}, \frac{2}{3}$ [D] $\frac{2}{3}, 0.619048, \frac{4}{7}$
- At an airport currency exchange counter, a traveler saw that 5400 Indonesian rupiahs could be exchanged for \$3 in U.S. currency. How many dollars could be exchanged for 31,500 rupiahs?
[A] \$15.50 [B] \$19
[C] \$17.50 [D] \$16.50
- A mail carrier delivers 19,200 pieces of mail in six days. how many pieces of mail are delivered in 30 days?
[A] 92,800 [B] 98,600
[C] 94,000 [D] 96,000

Evaluate:

- Evaluate: $\frac{48 \cdot 4^2 - 3 \cdot 5^2}{5 + 4^2}$
[A] $1744\frac{5}{7}$ [B] $\frac{21}{683}$
[C] 33 [D] $452\frac{1}{3}$
- $(48 + 9 \cdot 6 \div 9 - 24) \div 5$
[A] 15 [B] 6 [C] 332 [D] 12
- Add: $(3z^5 - 4z^4 + 4) + (6z^5 - 5z + 3)$
[A] $-3z^5 - 4z^4 - 5z + 1$
[B] $-3z^5 - 4z^4 + 5z + 1$
[C] $9z^5 - 9z^4 + 7$ [D] $9z^5 - 4z^4 - 5z + 7$
- Subtract: $(-x^2 - 8x - 4) - (-7x^2 - 4x - 6)$
[A] $6x^2 - 12x - 10$ [B] $6x^2 - 4x - 10$
[C] $6x^2 - 4x + 2$ [D] $6x^2 + 4x + 2$

15. Simplify: $(5z^4 + 2) - (3z^2 - 4) + (2z^4 + 5z^2)$
 [A] $7z^4 + 2z^2 - 2$ [B] $7z^4 - 2z^2 - 6$ [C] $7z^4 + 2z^2 + 6$ [D] $3z^4 + 2z^2 - 2$

16. What is the perimeter of the next figure?

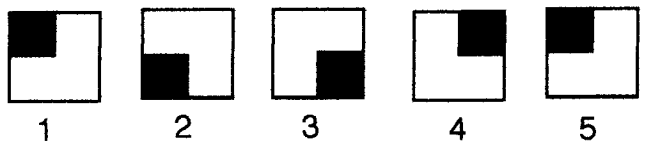


- [A] 36 [B] 30 [C] 34 [D] 32

17. Give the next two numbers for the pattern 9, 5, 12, 8, 15, 11, 18, 14,

- [A] 23, 19 [B] 17, 24 [C] 21, 28 [D] 21, 17

18. Draw the 27th square in the pattern.



- [A]  [B]  [C]  [D] 

Solve:

19. $x - 7 = -6$ [A] -13 [B] 13 [C] 1 [D] -1

20. $x + 5 = 6$ [A] 1 [B] 11 [C] -1 [D] -11

21. $-\frac{x}{5} = 30$ [A] 6 [B] 150 [C] -150 [D] -6

22. $45 = 5y$ [A] 50 [B] 40 [C] $\frac{1}{40}$ [D] 9

23. $\frac{5}{8}y - 6 = 4$ [A] $-3\frac{1}{5}$ [B] 17 [C] 16 [D] $6\frac{1}{4}$

24. Translate the sentence into an equation. Eight times a number y is equal to one-half the difference of w and t .

- [A] $8(y = 0.5w - t)$ [B] $8 = \frac{y(w-t)}{2}$ [C] $8y = \frac{1}{2} \cdot (w - t)$ [D] $8 \cdot y = \frac{1}{2} \cdot w - t$

25. Translate the sentence into a formula. The volume of a pyramid is equal to one-third the area of the base multiplied by the height of the pyramid.

[A] $V = \frac{1}{3}Bh$ [B] $V = 3 \cdot B \cdot h$

[C] $V = \frac{B}{3h}$ [D] $V = \frac{h}{3B}$

26. Translate the sentence into a formula. The surface area of a cylinder equals the product of 2π , and the radius multiplied by the sum of the radius and the height.

[A] $S = 2\pi \cdot (r + h)$ [B] $S = 2\pi r^2 h$

[C] $S = 2\pi + r(r + h)$ [D] $S = 2\pi r(r + h)$

Solve:

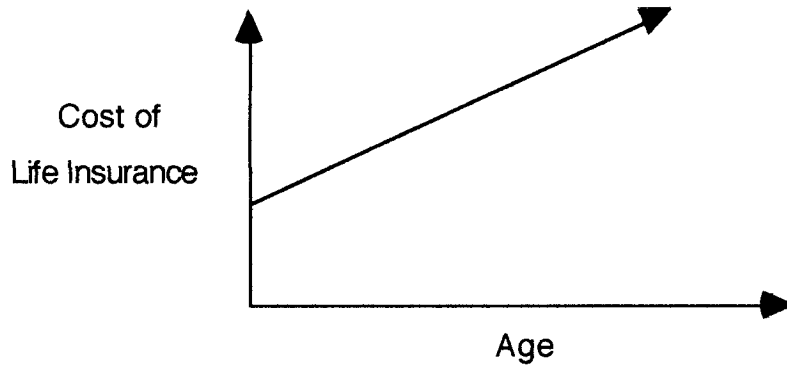
27. $5x - 4 = x - 6$

[A] $-\frac{1}{2}$ [B] -2 [C] $\frac{1}{2}$ [D] $\frac{1}{5}$

28. $x + 2 = 3(2x - 3)$

[A] $\frac{9}{5}$ [B] 1 [C] $-\frac{7}{5}$ [D] $\frac{11}{5}$

29. Which table of data is most appropriate for the graph below?



[A]

age	20	40	60	80
cost	\$30	\$230	\$1630	\$3630

[B]

age	20	40	60	80
cost	\$100	\$100	\$200	\$200

[C]

age	20	40	60	80
cost	\$250	\$200	\$150	\$100

[D]

age	20	40	60	80
cost	\$70	\$110	\$150	\$190

30. Find $f(2)$ given $f(x) = -2x^2 + 3x - 9$.

[A] -5

[B] -2

[C] -11

[D] -7

Gateway Practice Test 1		
Question	SPI	Glencoe Alg 1 Test Generator
1	31c	1.1.1.2
2	31c	1.1.1.2
3	31c	1.1.1.2
4	31c	1.1.1.2
5	31c	1.1.1.2
6	31c	1.1.1.2
7	31c	1.1.1.2
8	12a	2.4.2.28
9	12c	4.1.2.3&4&5&6&7
10	12c	4.1.2.3&4&5&6&7
11	21a	1.3.1.24&26
12	21a	1.3.1.24&26
13	22a	9.5.1.32&34, 9.6.2.38
14	22a	9.5.1.32&34, 9.6.2.38
15	22a	9.5.1.32&34, 9.6.2.38
16	31a	1.2.1.15&17
17	31b	1.2.1.16
18	31a	1.2.1.15&17
19	31e	3.1.1.2
20	31e	3.1.1.4
21	31e	3.1.1.6
22	31e	3.1.1.8
23	31e	3.1.1.10
24	32b	2.9.2.57&58&59&60&61
25	32b	2.9.2.57&58&59&60&61
26	32b	2.9.2.57&58&59&60&61
27	32e	3.5.1.26
28	32f	3.5.2.28
29	32g	1.9.2.52
30	32i	5.5.2.36

Gateway Practice Test 1. Do not write on this test.

- [1] D
- [2] A
- [3] B
- [4] A
- [5] A
- [6] C
- [7] A
- [8] B
- [9] C
- [10] D
- [11] C
- [12] B
- [13] D
- [14] C
- [15] C
- [16] B
- [17] D
- [18] C
- [19] C
- [20] A
- [21] C
- [22] D
- [23] C
- [24] C
- [25] A
- [26] D
- [27] A
- [28] D
- [29] D
- [30] C