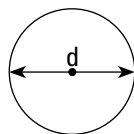
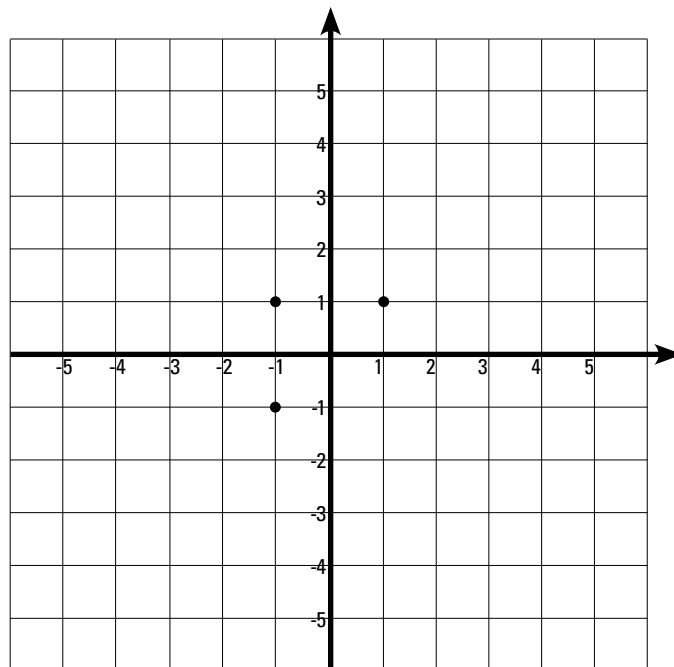


- Simplify: $2(3s - 8) + 7$
 A) $6s - 9$ B) $6s - 1$ C) $-10s + 7$ D) $6s + 23$
- Multiply: $(a^4b^2)(ab^3)$
 A) a^4b^5 B) ab^6 C) a^5b^5 D) ab^5
- Solve for b : $a = \frac{1}{2}bc^2$
 A) $2a - c^2$ B) $\frac{a}{2c^2}$ C) $\frac{2a}{c^2}$ D) $\frac{a - c^2}{2}$
- An employee who produces x units per hour earns an hourly wage of $y = 0.10x + 10$. Find the hourly wage for an employee who produces 10 units per hour.
 A) \$11.00 B) \$10.10 C) \$10.90 D) \$20.00
- Find the slope of the line passing through the points $(8, -3)$ and $(-10, -5)$.
 A) -9 B) $-\frac{1}{9}$ C) $\frac{1}{9}$ D) 9
- Find the mean of 14, 4, 12, 8, 6, 16:
 A) 6 B) 10 C) 12 D) 8
- A rectangular prism has a length of 5 cm and width of 10 cm. If the volume of the prism is 300 cm^3 , find the height. (Volume of a rectangular prism is $V = LWH$).
 A) 1 cm B) 3 cm C) 5 cm D) 6 cm
- Find the area of the circle if $d = 10$ yd. Use $\pi = 3$.



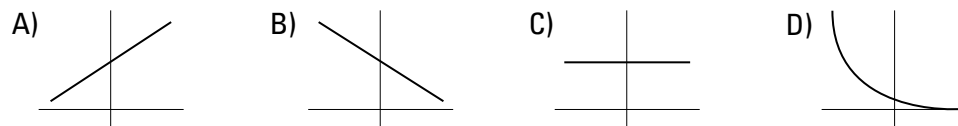
- A) $A = 75 \text{ yd}^2$ B) $A = 300 \text{ yd}^2$ C) $A = 30 \text{ yd}^2$ D) $A = 25 \text{ yd}^2$

9. Solve: $4x - 8 = 12$
- A) 5 B) 3 C) 6 D) 4
10. Write in simplest form: $\frac{12a^5b}{24ab^2}$
- A) $\frac{a^5}{2b^2}$ B) $2a^4b$ C) $\frac{a^4}{2b}$ D) $\frac{2a^5}{b^2}$
11. A survey is taken to determine the number of Seneca college students who use laptops. Which of the following would be a representative sample?
- A) Only students in first year.
 B) Every second student in a first semester.
 C) A random selection of students in a college English class.
 D) 50 males and 50 females selected randomly from a college student list.
12. Give the the ordered pair that would complete the "square" in the graph below.



- A) (0, 0)
 B) (1, -1)
 C) (-1, -1)
 D) (-1, 1)

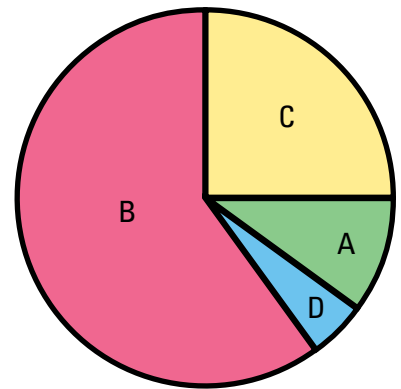
13. Which of the following graphs represents a decreasing relationship?



14. Distribute and collect like terms: $8y - (-7y - 4x)$
- A) $y - 4x$ B) $15y + 4x$ C) $15y - 4x$ D) $y + 4x$
15. Simplify: $\left(\frac{x}{y^5}\right)^2$
- A) $\frac{x}{y^{10}}$ B) $\frac{x^2}{y^{10}}$ C) $\frac{x^2}{y^{25}}$ D) $\frac{x^2}{y^5}$
16. Find the value of the polynomial $x^3 - 4x$ when $x = -2$.
- A) 0 B) -16 C) -2 D) 16
17. Multiply: $(x + 4)(x - 4)$
- A) $x^2 + 16$ B) $x^2 + 8x^2 - 16$ C) $x^2 - 16$ D) $x^2 - 8x - 16$

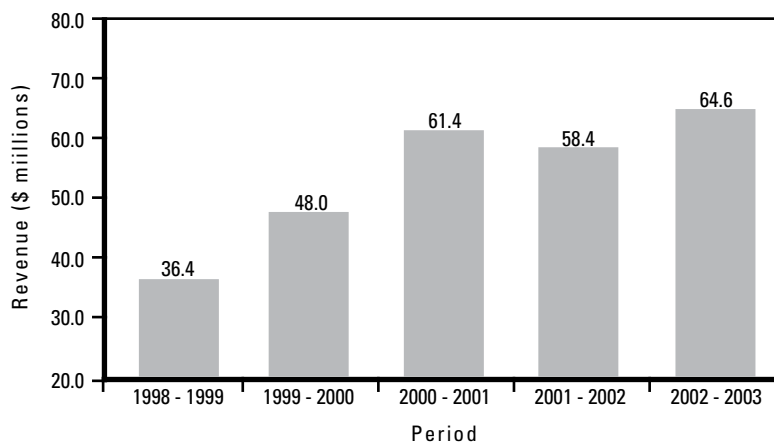
The pie graph below shows the fractions of students' grades (A, B, C and D) for a first-year college math course. Answer the following questions (#18, 19 and 20) based on the pie graph.

18. The majority of students in the course obtained a grade of
- A) A B) B
C) C D) D
19. The fewest number of students in the course obtained a grade of
- A) A B) B
C) C D) D
20. Approximately what percentage of students received a grade of C?
- A) 5% B) 10% C) 25% D) 60%
21. Evaluate the expression $4a - 7b$ if $a = -2$ and $b = 3$.
- A) 29 B) -30 C) -29 D) -28



22. Which of the ordered pairs is a solution for the equation $4x - 2y = 8$?
- A) (-2, -4) B) (0, -4) C) (-2, 0) D) (0, 4)
23. A person runs 500m in 30 seconds. How many metres will that person run in 3 min (if they keep the same speed)?
- A) 250m B) 3000m C) 300m D) 1000m
24. Solve for x: $-\frac{1}{4}x = 2$
- A) $x = 8$ B) $x = -8$ C) $x = -\frac{1}{2}$ D) $x = \frac{1}{2}$

The graph below shows amount of revenue gained per yearly period. Use this graph to answer the following questions (#25, #26 and #27):



25. Which period showed the highest revenue?
- A) 2002 - 2003 B) 1998 - 1999 C) 2000 - 2001 D) 1999 - 2000
26. Which period showed the lowest revenue?
- A) 2002 - 2003 B) 1998 - 1999 C) 2000 - 2001 D) 1999 - 2000
27. What was the difference in revenue between the period 1999 - 2000 and 2002 - 2003?
- A) 11.4 million B) 15.4 million C) 13.4 million D) 16.6 million

Mathematics Practice Test #3

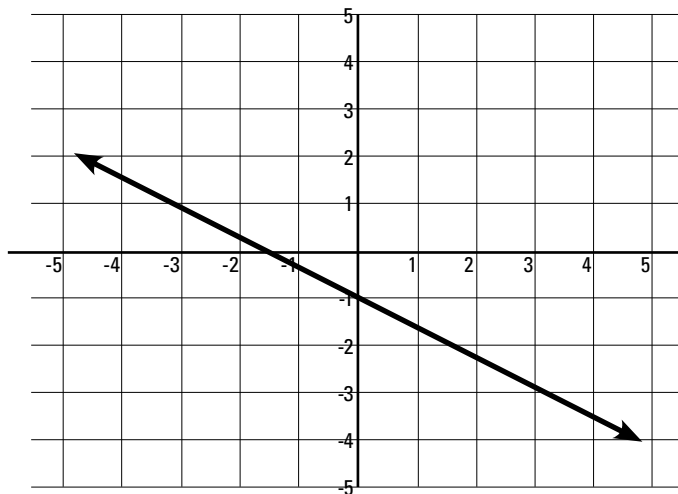
28. The formula $^{\circ}C = \frac{5}{9}(^{\circ}F - 32)$ converts temperatures in Fahrenheit to Celsius. Find the Celsius equivalent of $77^{\circ}F$.

- A) $85^{\circ}C$ B) $65^{\circ}C$ C) $45^{\circ}C$ D) $25^{\circ}C$

29. The area of a triangle with a base of 40 cm and altitude of 60 cm is:

- A) 120 cm^2 B) 1200 cm^2 C) 240 cm^2 D) 2400 cm^2

30. What is the slope of the line in the graph below?



- A) $\frac{2}{3}$
B) $-\frac{2}{3}$
C) $\frac{3}{2}$
D) $-\frac{3}{2}$

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