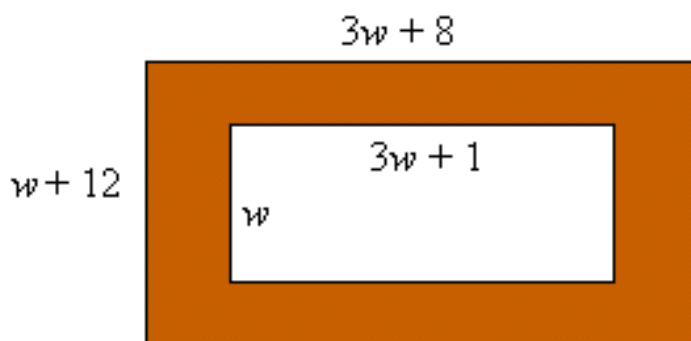


21. If $3a - 4b = 17$ and $4a - 3b = 18$, then $a - b =$ _____.

- A. -1
- B. 1
- C. 5
- D. 9

22. The swimming pool shown below is surrounded by a walkway. The width of the swimming pool is represented by w . Which is an expression for the area of the walkway?

- A. $4w^2 + 1$
- B. $43w - 21$
- C. $40w + 63$
- D. $43w + 96$



23. Given the standard form of the line $4x + y = 6$, determine the slope.

- A. $m = -4$
- B. $m = -2$
- C. $m = 4$
- D. $m = 6$

24. Which of the following terms is written in scientific notation?

- A. 3.4×5^2
- B. 0.2×10^{-2}
- C. 4.7×10^2
- D. 7×10^5

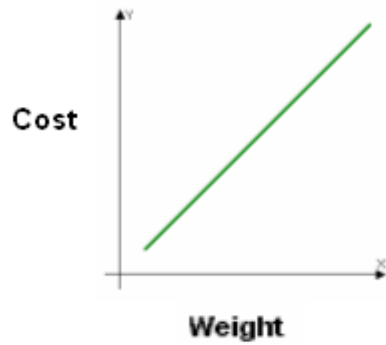
25. Use the data in the table below showing the number of geese and trout in and around Mrs. Plum's pond. Suppose there were 16 geese in the year 2000; predict how many trout you would expect in Mrs. Plum's pond that year

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Geese	13	10	10	11	13	14	20	22	12	23
Trout	1614	2348	1956	1878	1798	1600	896	498	1900	392

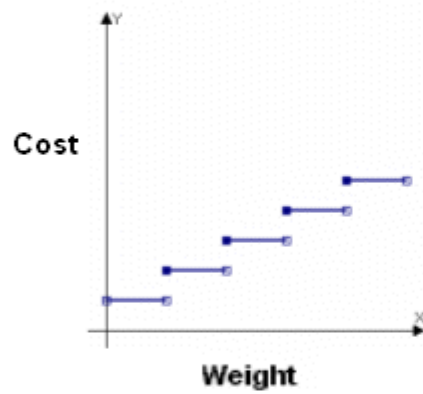
- A. 500 trout
- B. 1000 trout
- C. 1300 trout
- D. 1800 trout

26. A mail delivery service increased the cost of first-class postage to 40 cents for the first ounce or fraction of and 25 cents for each additional ounce or fraction. Which graph below best represents the cost of mailing a first-class item that weighs x ounces?

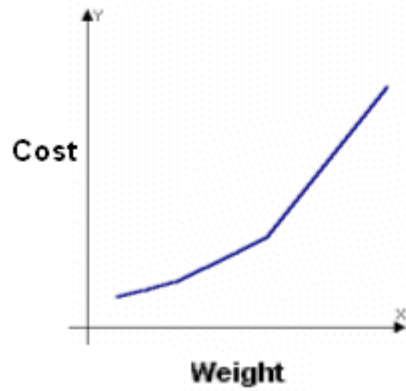
A.



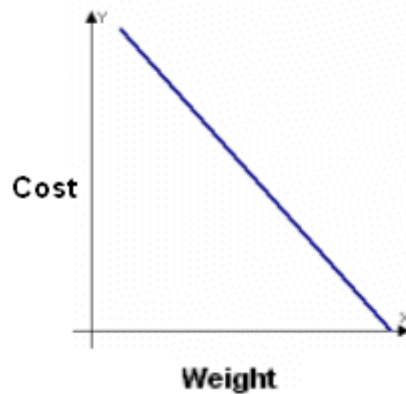
B.



C.

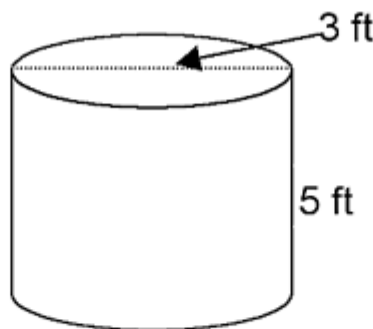


D.



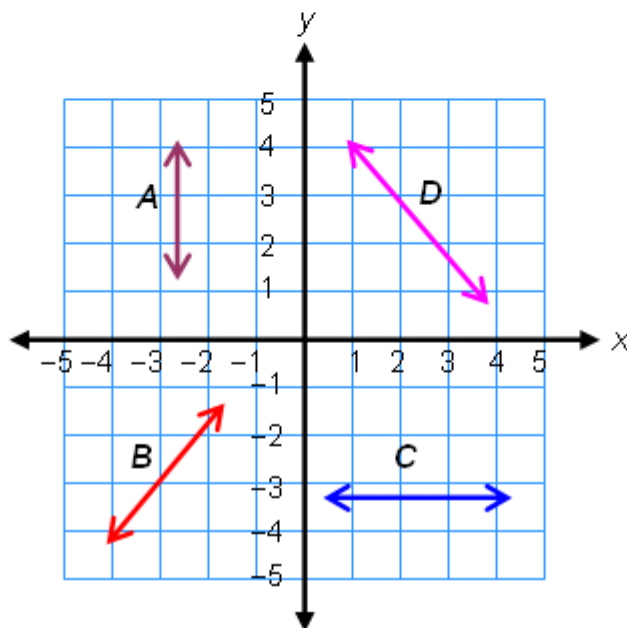
27. The formula for the surface area of a cylinder is $2\pi r^2 + 2\pi rh$, where r is the radius and h is the height. What is the surface area of the cylinder shown? Use 3.14 for π .

- A. 61.23 square feet
- B. 141.3 square feet
- C. 150.72 square feet
- D. 339.12 square feet



28. Which of the lines graphed below appears to have a positive slope?

- A. line A
- B. line B
- C. line C
- D. line D



29. Raymond has \$24,500 in his college savings account. This account increases at a rate of 6.375% each year, compounding annually. How much money will be in Raymond's account in 3 years?

- A. \$24,971.56
- B. \$29,490.68
- C. \$107,574.67
- D. \$468,562.50

30. The area of a rectangular table is $x^2 - 11x + 28$. If the width of the table is $(x - 4)$, what is the length?

- A. $x + 7$
- B. $x - 7$
- C. $x + 21$
- D. $x - 24$

Answer Key for problems 21-30

21	C
22	D
23	A
24	D
25	C
26	B
27	A
28	B
29	B
30	B