

13. D If $f(x) = 4x^0 + (4x)^{-1}$, what is the value of $f(4)$?

A. -12

B. 0

C. $1\frac{1}{16}$

D. $4\frac{1}{16}$

$$\begin{aligned} f(4) &= 4(4)^0 + [4(4)]^{-1} \\ &= 4 + 16^{-1} \\ &= 4 + \frac{1}{16} \end{aligned}$$

14. C Which expression represents the number of yards in x feet?

A. $\frac{x}{12}$

B. $3x$

$$\frac{x}{3}$$

C. $\frac{x}{3}$

D. $12x$

15. A Tara buys two items that cost d dollars each. She gives the cashier \$20. Which expression represents the change she should receive?

A. $20 - 2d$

B. $20 + 2d$

C. $20 - d$

D. $2d - 20$

$$20 - 2d$$

16. C A pizza restaurant charges for pizzas and adds a delivery fee. The cost (c), in dollars to have any number of pizzas (p) delivered to a home is described by the function $c = 8p + 3$. Which statement is true?

A. The cost of 8 pizzas is \$11.

B. The cost of 3 pizzas is \$14.

C. Each pizza costs \$8 and the delivery fee is \$3.

D. Each pizza costs \$3 and the delivery fee is \$8.

17. A The points scored by a football team are shown in the stem-and-leaf plot below.

Football Team Points

0	6							
1	2	3	4	7				
2	0	3	4	4	7	8	8	8
3	0	7	8					

Key

1 | 3 = 13 points

What was the median number of points scored by the football team?

A. 24

B. 27

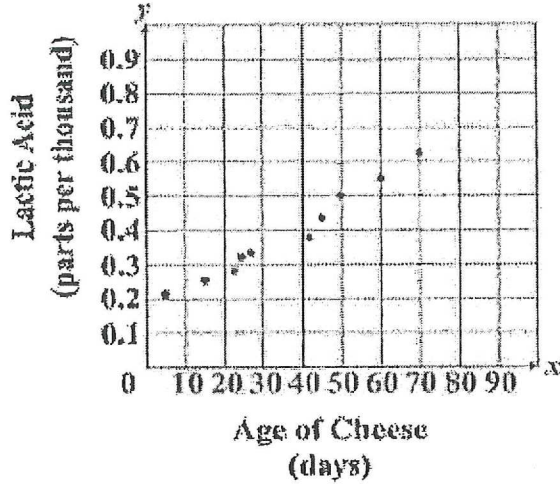
C. 28

D. 32

$6, 12, 13, 14, 17, 20, 23, 24, 24, 27, 28, 28, 28, 30, 31, 38$

18. B

The scatterplot below shows data from an experiment that tested the amount of lactic acid present in aging cheese.



Which best describes the relationship between the age of the cheese and the amount of lactic acid present in the cheese, as shown in the scatter plot?

- A. There is no correlation.
- B. There is a positive correlation.
- C. There is a negative correlation.
- D. There is a non-linear correlation.

19. C

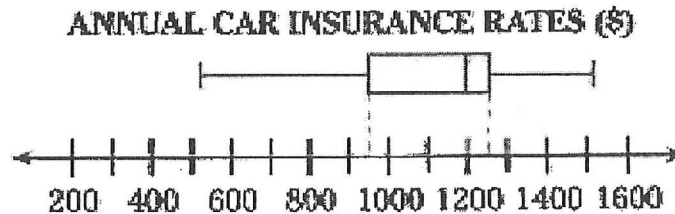
There are exactly 9 buttons in a bag. There are 4 blue buttons and 3 red buttons, and the rest are yellow. If one button is drawn at random from the bag, what is the probability that the button is yellow? (2 yellow)

- A. $1/9$
- B. $1/7$
- C. $2/9$
- D. $2/7$

$$\frac{2}{9}$$

20. A

Daisy gather information on annual car insurance rates in her area. These data are shown in the box-and-whisker plot below.



$$\begin{array}{r} \$1250 \\ - 950 \\ \hline \$300 \end{array}$$

What amount is closest to the interquartile range of these rates?

- A. \$300
- B. \$525
- C. \$675
- D. \$950