

A.11

1. Which is equivalent to $(5x^2 + 4x + 1) + (-7x + 2)$?

- A $-2x^2 + 6x + 1$
- B $5x^2 - 3x - 1$
- C $5x^2 - 3x + 3$
- D $5x^2 + 11x + 3$

2. Which expression is equivalent to $\frac{8x^4 - 2x^2}{2x^2}$?

- F $4x^2$
- G $6x^2$
- H $4x^2 - 1$
- J $6x^2 - 1$

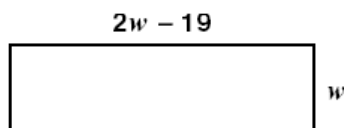
3. Which expression is equivalent to $(9x + 1)(9x - 1)$?

- A $18x$
- B $81x^2 - 1$
- C $18x^2 - 1$
- D $81x^2 - 18x - 1$

4. Ben's Bakery charges a fee of $2d + 25$ to deliver d boxes of baked goods while Dan's Bakery charges $3d + 20$. Which expression describes how much more Dan's Bakery charges than Ben's Bakery?

- F $5d + 45$
- G $d - 5$
- H $d + 5$
- J $-d + 5$

5. The length of a rectangular classroom floor is 19 feet less than twice the width.



Which expression represents the area of the classroom floor?

- F $3w - 19$
- G $6w - 38$
- H $2w^2 - 19w$
- J $2w^2 - 19$

6. $\frac{12x^5y - 3x^{10}y^3 + 21x^{15}y^4}{3x^5y}$ is equivalent to —

- A $4 - x^5y^2 + 7x^{10}y^3$
- B $4xy - x^5y^2 + 7x^{10}y^3$
- C $4 - x^5y^3 + 7x^{10}y^4$
- D $4xy - x^2y^3 + 7x^3y^4$

7. If $x \neq 0$, which expression is equivalent to

$$\frac{8x^7 - 2x^3 + 2x}{2x}?$$

- A $6x^6 - x^2$
- B $4x^6 - x^2$
- C $6x^7 - x^3 + x$
- D $4x^6 - x^2 + 1$

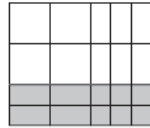
8.

Consider the following models

$$\square = x^2 \quad \square = x \quad \square = 1$$

$$\blacksquare = -x^2 \quad \blacksquare = -x \quad \blacksquare = -1$$

What polynomial is represented by this diagram?



- F $4x^2 - 10x - 6$
- G $4x^2 - 2x - 6$
- H $4x^2 + 2x - 6$
- J $4x^2 + 10x + 6$

9.

Which expression is equivalent to

$$2x^3y(x^2y - 3xy^2)?$$

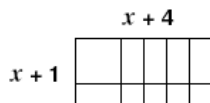
- F $2x^5y^2 - 6x^4y^3$
- G $3x^5y^2 - 5x^4y^3$
- H $2x^6y^2 - 6x^3y^2$
- J $2x^6y - 6x^3y^3$

10.

Consider the following models.

$$\square = x^2 \quad \square = x \quad \square = 1$$

Which expression represents the area of the diagram below?



- A $x^2 + 5x + 4$
- B $2x + 5$
- C $4x + 10$
- D $x^2 + 4$

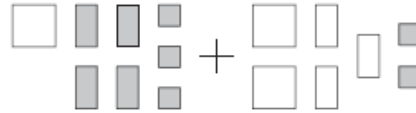
11.

Consider the following models.

$$\square = x^2 \quad \square = x \quad \square = 1$$

$$\blacksquare = -x^2 \quad \blacksquare = -x \quad \blacksquare = -1$$

What polynomial is represented by the following?

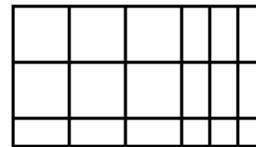


- F $3x^2 - x - 5$
- G $3x^2 - 7x - 5$
- H $3x^2 + 7x - 5$
- J $3x^2 + x - 5$

12.

$$\square = x^2 \quad \square = x \quad \square = 1$$

Consider the models above.



What polynomial is represented by this diagram?

- A $6x^2 + 12x$
- B $2x^2 + 3x + 1$
- C $6x^2 + 9x + 3$
- D $9x^2 + 6x + 3$

