

CA Algebra 1 Standard 13.0

MULTIPLE CHOICE

1. What is $\frac{(y-4)^2}{3y} \cdot \frac{(y-2)}{(y+4)(y-4)}$ reduced to lowest terms?
- A. $\frac{y-2}{3y(y+4)}$ C. $\frac{(y-4)(y-2)}{3y(y+4)}$
B. $\frac{(y-2)^2}{3y(y+4)}$ D. $\frac{(y-4)(y-2)}{3y(y-4)}$
2. $\frac{7x}{4x+3} \cdot (8x+6) =$
- A. $28x$ C. $\frac{7(8x+6)}{4+3}$
B. $\frac{7x}{2}$ D. $14x$
3. What is $\frac{8x}{x^2-16} - \frac{5}{x+4}$ reduced to lowest terms?
- A. $\frac{3x(x-4)}{(x+4)(x-4)}$ C. $\frac{3x-20}{(x+4)(x-4)}$
B. $\frac{3x+20}{(x+4)(x-4)}$ D. $\frac{3x}{(x+4)(x-4)}$
4. What is $\frac{3}{8x^2} + \frac{1}{x} - \frac{1}{2x}$ reduced to lowest terms?
- A. $\frac{4x+3}{10x^2}$ C. $\frac{3}{4x}$
B. $\frac{4x+3}{8x^2}$ D. $\frac{3}{8x^2}$
5. $\frac{-12+4x}{4} \div \frac{-6+2x}{6} =$
- A. 3 C. $-10x$
B. $\frac{3(x-3)}{x+3}$ D. 6

6. Which fraction is equivalent to the product $(x + 5) \cdot \frac{x^2 - 16}{x^2 + 11x + 30}$?

A. $x + 6$

C. $\frac{x^3 + 5x^2 - 16x - 80}{x^2 + 11x + 30}$

B. $\frac{x^2 - 80}{x^2 + 11x + 30}$

D. $\frac{x^2 - 16x - 80}{x^2 + 11x + 30}$

7. $\frac{-2x^6}{7} \div \frac{4x}{5} =$

A. $\frac{-8x^7}{35}$

C. $\frac{10x^7}{28}$

B. $\frac{8x^6}{35}$

D. $\frac{-5x^5}{14}$

8. Which fraction is equivalent to the product $\frac{c^2 + 3c}{c^2 + 2c - 3} \cdot \frac{c + 1}{c}$?

A. $\frac{c^3 + 4c^2 + 3c}{c^3 + 2c^2 - 3c}$

C. $\frac{c^3 + 4c^2 + 3c}{c^2 + 2c - 3}$

B. $\frac{c^2 + 4c + 3}{c^3 + 2c^2 - 3c}$

D. $\frac{c^3 + 4c^2 + 3c + 1}{c^3 + 2c^2 - 3c}$

9. Which fraction is equivalent to the quotient $\frac{2a - 5b}{a - 3b} \div \frac{4a - 25b}{a + 2b}$?

A. $\frac{2a^2 - ab + 10b^2}{4a^2 - 37ab - 6b^2}$

C. $\frac{2a^2 - ab - 10b^2}{4a^2 - 37ab - 75b^2}$

B. $\frac{2a^2 - ab - 10b^2}{4a^2 - 37ab + 75b^2}$

D. $\frac{2a^2 - ab + 10b^2}{4a^2 + 37ab + 75b^2}$

10. $\frac{6x}{12x^2} + \frac{5}{24x^3} =$

A. $\frac{12x + 5}{24x^3}$

C. $\frac{6x + 5}{24x^3}$

B. $\frac{12x^2 + 5}{24x^2}$

D. $\frac{12x^2 + 5}{24x^3}$