

1. (6 points) Evaluate the following expressions.

(a) $19 - (7 + |3 - 3^2 \cdot 2|)$

(b) $\left(\frac{1}{5} - \frac{3}{8}\right) + \left(\frac{3}{4} \cdot \frac{7}{5}\right)$

(c) $(4^0 - 4^2) \div \frac{2(3-2)}{1+|-3|}$

2. (4 points) Expand and simplify the following algebraic expressions.

(a) $5(x+3)(4x-3) - 5x(x+3)$

(b) $2 - (1-x)^2$

1. Evaluate each of the following expressions.

a. $10 + 5^0 - 3(5 + (-2)^2)$

b. $\frac{5}{3+4} \div (3+7) + \frac{2}{3}$

c. $5 \times \left| \frac{1}{2} - \frac{11}{3} \right| - \left| \frac{3}{5+3} \right|$

1. Evaluate each of the following expressions.

a. $7 - [-3^2 - (-2)^2]^2 + \frac{2}{5} \left(\frac{50}{4} \right)$ b. $\frac{9}{2} \div \left(\frac{5}{6} + \frac{11}{3} \right) \times \frac{8}{3}$ c. $3 \div \frac{5(-9)}{3^0 - |-2|}$

2. Expand each of the following expressions and collect like terms.

a. $-[2x - (7x-2)]^2 + \frac{2}{3}(9-6x)$ b. $3(x+4)(x-\frac{1}{2}) - (2x+1)(2x-1)$

c. $(3x-2)^3$



1. Find the exact value of each of the following *Show your work and do not give decimal answers.*

(a) $\frac{3}{2} \cdot \frac{8}{15} \div 2\frac{6}{7}$

(b) $\frac{-5^0(-3)^3 + 48}{5|8 - 23|}$



1. Find the exact value of each of the following *Show your work and do not give decimal answers.*

(a) $\left(1\frac{1}{3}\right) \left(5\frac{1}{2}\right) \div \frac{7}{6}$

(b) $\frac{-3^0(-2)^5 + 1}{3|4 - 20|}$