

Math 054 Ch. 10,11 Show all your work.

Subtract: $-\frac{1}{7} - -\frac{1}{6}$

Which number is larger, $(-2)^4$ or $(-2)^5$? Why?

Simplify: $4^5 - 2^6 + 4$

The temperature in a chemical compound was -5°C at 3:20 P.M. During a reaction, it increased 2°C per minute until 3:52 P.M. What was the temperature at 3:52 P.M.?

Simplify: $\frac{(3-5)^2 - |7-13|}{(12-9)^2 + (11-14)^2}$

Yuri had \$68 in his checking account. After writing checks to make seven purchases of DVDs at the same price for each, the balance in his account was - \$64.65. What was the price of each DVD?

Evaluate $\frac{p-q}{2}$, when $p = 15$ and $q = 3$.

Multiply: $-3.1(-1.2x + 3.2y - 1.1)$

Factor: $-14x + 21y + 7$

The formula for finding the perimeter of a rectangle is $P = 2l + 2w$. If the perimeter of a rectangle is 36 cm and the length is 11 cm, then what is the width?

Solve: $-4x + 7 = 35$

Solve: $5 - 2x = 3x - 7x + 25$

Solve: $\frac{7}{8}x - \frac{1}{4} + \frac{3}{4}x = \frac{1}{16} + x$

Solve: $3(r - 6) + 2 = 4(r + 2) - 21$

A company buys a copier for \$10,000. The Internal Revenue Service values the copier at $\$10,000 \left(1 - \frac{n}{20}\right)$ after n years. After how many years will the copier be valued at \$5,500?

Solve: $0.9(2x + 8) = 20 - (x + 5)$

Add $-\frac{4}{3} + \frac{2}{3}$

Add: $28 + (-44) + 17 + 31 + (-94)$

Subtract: $-\frac{1}{7} - \frac{1}{6}$

The lowest elevation in Asia, the Dead Sea, is 1286 ft below sea level. The highest elevation in Asia, Mount Everest, is 29,028 ft. Find the difference in elevation between the highest point and the lowest point.

Multiply: $\frac{4}{5} - \frac{2}{3} - \frac{15}{7} \frac{1}{2}$

Divide: Write your answer as a fraction: $-\frac{5}{8} \div -\frac{6}{5}$

Simplify: $14 - 2(-6) + 7$

Simplify: $\frac{(3 - 5)^2 - (7 - 13)}{(12 - 9)^2 + (11 - 14)^2}$

Evaluate $\frac{5y}{z}$ when $y = -15$ and $z = -25$

Multiply: $-9(-5x - 6y + 8)$

Factor: $9a + 6b - 15$

Collect like terms: $-8 + 11a - 5b + 6a - 7b + 7$

Solve: $y - \frac{3}{4} = \frac{5}{6}$

Solve: $-\frac{5}{7}x = -\frac{10}{14}$

Solve: $-91 = 9t + 8$

Solve: $-6y + 3y = 27$

Solve: $\frac{2}{3} + 3y = 5y - \frac{2}{15}$

Solve: $0.96y - 0.79 = 0.21y + 0.46$

Solve: $5(d + 4) = 7(d - 2)$

Solve: $0.9(2x + 8) = 20 - (x + 5)$