

Adding & Subtracting Fractions

Done!

Date:

Find the sum or difference. Write your answer in simplest form.

1. $\frac{4}{7} + \frac{1}{3}$

2. $1\frac{3}{8} - \frac{1}{12}$

3. $4\frac{3}{10} - \left(-2\frac{4}{5}\right)$

4. $9\frac{2}{9} + \left(-8\frac{5}{6}\right)$

Fraction Applications (Add/Sub)

Done!

Date:

1. On average, it takes Xavier $2\frac{1}{6}$ hours to drive to his Mom's house. After $1\frac{3}{4}$ hours, how many hours does he have left to drive?
2. Sam made a slideshow with two songs that play in the background. One is $2\frac{5}{6}$ minutes and the other is $4\frac{7}{10}$ minutes. If both songs play in full, how long is the show?

Multiplying & Dividing Fractions

Day 2

Date:

Find the product or quotient. Write your answer in simplest form.

1. $\frac{2}{9} \cdot \frac{3}{5}$

2. $2\frac{3}{5} \cdot 1\frac{3}{7}$

3. $\frac{4}{7} \div \frac{8}{9}$

4. $3\frac{4}{9} \div 2\frac{1}{3}$

Fraction Applications (Mult/Div)

Day 2

Date:

1. It takes Rob $1\frac{7}{9}$ hours to cut the grass. If his son helps him, it takes $\frac{5}{8}$ as long. How long does it take Rob and his son to cut the grass?

2. Mrs. Kettler has $3\frac{1}{3}$ pounds of candy to distribute evenly to her four children. How much candy will each child get?

Exponents

Day 3

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Date:

Rewrite the expression using exponents:

1. $5 \cdot a \cdot b \cdot b \cdot 5 \cdot c \cdot a \cdot b \cdot 5 \cdot b$

Evaluate:

2. 4^9

3. $6^2 \cdot 2^5$

4. $\left(\frac{1}{3}\right)^3 \cdot (-18)^2$

Rewrite using positive exponents:

5. x^{-6}

6. $5^{-3} \cdot 3^{-1}$

7. $a^{-7} b^0 c^4$

Square Roots & Cube Roots

Day 3

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Date:

Find each square root. Approximate to the nearest tenth if necessary.

1. $\sqrt{256}$

2. $-\sqrt{25}$

3. $\sqrt{28}$

4. $-\sqrt{\frac{4}{49}}$

Between which two consecutive integers does the square root lie?

5. $\sqrt{114}$

6. $-\sqrt{42}$

Find each cube root.

7. $\sqrt[3]{8}$

8. $\sqrt[3]{3,375}$

9. $\sqrt[3]{-216}$

Order of Operations

Day 4

Date:

Evaluate each expression:

1. $(10 - 2)^2 \div 4(2) - |-35|$

2. $\sqrt{9} - 2^7 + 16 \cdot 9$

3. $4 - \sqrt[3]{27} + 7(12 - 2^2)$

4. $\frac{(3 + 1) \cdot 10^2 - 5^3}{1 - 6^2 + 10}$

Evaluating Expressions

Day 4

Date:

Evaluate each expression:

1. $2(y + 3) - \sqrt{xz}$

(if $x = 2$, $y = -5$, and $z = 18$)

2. $2n^2 - 4n + 5$

(if $n = -3$)

3. $|3a| - \frac{5}{4}b$

(if $a = -7$ and $b = \frac{2}{15}$)

Translating Expressions

Days

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Date:

Translate the following expressions:

1. "five more than 3 times a number" _____
2. "the quotient of twice a number and 7" _____
3. "10 less than a number" _____
4. "the product of -6 and a number" _____
5. "13 more than a number" _____
6. "25 less than one-third of a number" _____
7. "the sum of a number squared and 14" _____
8. "\$18 per pound of steak" _____

Combining Like Terms

Days

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Date:

Simplify each expression:

1. $9 - 6x + 5$
2. $5x - 7 - 3x + 5$
3. $-7p - 1 - 9p + 5$
4. $15h - 6 - 8 + 7h$
5. $-27 + 8w + 4 - w$
6. $19a - 6b + b - 6a$

Distributive Property

Day 6

Date:

Simplify each expression:

1. $4(x + 4)$

2. $2(w - 8)$

3. $-8(v - 7)$

4. $-3(y + 9)$

5. $6(2x + 4)$

6. $-4(1 - 7x)$

Simplifying Expressions

Day 6

Date:

Simplify each expression:

1. $-4(x + 2) - 3x$

2. $2(1 - 2p) + 9p$

3. $10(v - 2) - v + 4$

4. $3(10y - 3) + 12y + 5$

5. $8k - 3(4k - 7) + 27$

6. $9c + 2(c - d) - (8c + 3d)$

Dividing Monomials

Day 7

Date:

Simplify each expression. Final answers must contain positive exponents only.

1. $\frac{(-2)^{-1}}{(-2)^4}$

2. $\frac{m^7 n^{16}}{m^9 n^5}$

3. $\frac{30h^6}{-6h^{-3}}$

4. $\frac{4c^{11} d^{-3}}{14c^8 d^{-3}}$

5. $\frac{24v^7}{4v^2} + 5v^5$

6. $\frac{15n^2}{-4n^{-5} \cdot 3n^{-3}}$

Powers of Monomials

Day 7

Date:

Simplify each expression. Final answers must contain positive exponents only.

1. $(8^5)^4$

2. $(5c^6 d^2)^3$

3. $(-7a^4 b^{-1})^2$

4. $(2c^{-4} b^{-3})^{-5}$

5. $(4m^2 n)^3 \cdot 2m^{-6} n^7$

6. $\frac{(-6r^7 s^9)^2}{9r^{15} s^6}$

Multi-Step Equations

Day 8

Date:

Solve each equation:

1. $5x - 7 + 2 - 2x = -26$

2. $-6(a + 4) = -30$

3. $9k - 2(5k + 3) = -7$

4. $-\frac{4}{3}(9y - 15) + 7 = 3$

Variables on Both Sides

Day 8

Date:

Solve each equation:

1. $-2x + 2 = 5x - 33$

2. $8a + 14 = 6a$

3. $2(4c - 11) = 3(c + 10) + 8$

4. $w - (w + 9) = \frac{3}{4}(8w - 20)$

Translating Equations

Day 9

Date:

Translate the following equations:

1. "The product of 7 and a number is 63." _____
2. "5 subtracted from 3 times a number is 44." _____
3. "The quotient of a number and -6, increased by 8, is -11." _____
4. "10 less than a number squared is 71." _____
5. "The difference between four-fifths of a number and 11 is -46." _____
6. "The sum of a number and 10, divided by 8, is -2." _____

Word Problems (One- and Two-Step Equations)

Day 9

Date:

Define a variable, set up an equation, and solve:

1. Three-fourths of the runners finished the St. Patrick's Day marathon. If 1,602 runners finished, how many entered the race?
2. There are 15 fewer runners on varsity track than junior varsity track. If there are 41 runners on junior varsity track, how many are on varsity?
3. Luke is 5 years older than twice his younger brother Thomas. If Luke is 19, how old is Thomas?

Two-Step Inequalities

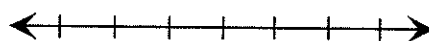
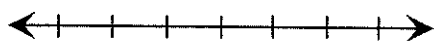
Day 10

Date:

Solve and graph each inequality:

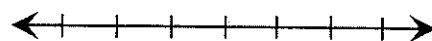
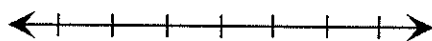
1. $2w + 5 > 45$

2. $\frac{y}{-5} + 4 \geq 1$



3. $-3n + 8 > -4$

4. $\frac{a}{8} - 4 \leq -2$



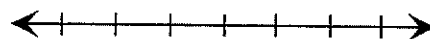
Multi-Step Inequalities

Day 10

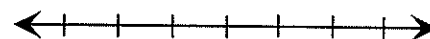
Date:

Solve and graph each inequality:

1. $6x - 5 - 8x \leq -3$



2. $3m - 6 > 3(2m + 7)$



3. $-\frac{8}{5} \left(\frac{5}{4}k - 20 \right) \leq 2(2k + 7)$

