Integers

Simplify.

1) $9 \times (-4) =$ _____

2) $(-16) + 17 =$ _____

3) $(-12) - 5 =$ _____

4) $(-9) \div (-3) =$ _____

5) $(-14) + (-1) =$ _____

6) $(-6) \times 0 =$ _____

7) $20 \div (-2) =$ _____

8) $14 - 13 =$ _____

9) $4 + 5 =$ _____

10) $(-6) \times (-7) =$ _____

11) $(-15) \div 3 =$ _____

12) $11 + (-19) =$ _____

13) $(-17) - (-19) =$ _____

14) $8 \div 1 =$ _____

15) $2 \times 7 =$ _____

16) $18 - (-10) =$ _____

Integers

Simplify.

1) $16 \div 2 =$ _____

2) $(-18) - (-8) =$ _____

3) $7 + (-14) =$ _____

4) $(-1) \times 9 =$ _____

5) $8 \times 4 =$ _____

6) $18 \div (-6) =$ _____

7) $(-15) - 12 =$ _____

8) $(-19) + (-4) =$ _____

9) $(-2) \times (-9) =$ _____

10) $7 - 3 =$ _____

11) $(-20) \div (-10) =$ _____

12) $10 \times (-3) =$ _____

13) $(-17) + 17 =$ _____

14) $(-12) \div 6 =$ _____

15) $19 - (-7) =$ _____

16) $13 + 20 =$ _____

Adding Like Fractions

All fractions: S1

1) $\frac{13}{10} + \frac{7}{10} =$ ☐

2) $\frac{24}{18} + \frac{30}{18} =$ ☐

3) $5\frac{1}{3} + \frac{1}{3} =$ ☐

4) $6\frac{2}{9} + 6\frac{3}{9} =$ ☐

5) $\frac{2}{13} + \frac{3}{13} =$ ☐

6) $\frac{3}{2} + 8\frac{1}{2} =$ ☐

7) $6\frac{4}{7} + 2\frac{3}{7} =$ ☐

8) $\frac{20}{19} + \frac{15}{19} =$ ☐

9) $\frac{7}{11} + \frac{5}{11} =$ ☐

10) $\frac{2}{5} + 9\frac{2}{5} =$ ☐

11) $3\frac{1}{8} + \frac{9}{8} =$ ☐

12) $2\frac{11}{20} + 4\frac{8}{20} =$ ☐

13) $\frac{19}{16} + \frac{29}{16} =$ ☐

14) $\frac{1}{4} + \frac{3}{4} =$ ☐

Multiplying Two Fractions

Find the product.

1) $\frac{9}{2} \times \frac{2}{3}$

2) $\frac{15}{7} \times \frac{6}{12}$

3) $\frac{8}{14} \times \frac{7}{6}$

4) $\frac{1}{5} \times \frac{19}{11}$

5) $\frac{5}{18} \times \frac{4}{9}$

6) $\frac{11}{6} \times \frac{7}{5}$

7) $\frac{6}{7} \times \frac{13}{7}$

8) $\frac{14}{15} \times \frac{3}{20}$

Student Name: _____ **Score:**

Dividing Fractions

T1S1

$\frac{1}{2} \div \frac{2}{3} =$ ☐ $\frac{4}{7} \div \frac{4}{5} =$ ☐ $\frac{5}{9} \div \frac{4}{9} =$ ☐

$\frac{8}{11} \div \frac{6}{8} =$ ☐ $\frac{5}{6} \div \frac{7}{8} =$ ☐ $\frac{9}{13} \div \frac{1}{3} =$ ☐

$\frac{2}{5} \div \frac{4}{5} =$ ☐ $\frac{8}{15} \div \frac{5}{6} =$ ☐ $\frac{1}{7} \div \frac{2}{9} =$ ☐

$\frac{4}{14} \div \frac{7}{8} =$ ☐ $\frac{3}{4} \div \frac{1}{2} =$ ☐ $\frac{2}{3} \div \frac{10}{13} =$ ☐

$\frac{5}{9} \div \frac{2}{6} =$ ☐ $\frac{8}{11} \div \frac{4}{5} =$ ☐ $\frac{5}{12} \div \frac{6}{9} =$ ☐

Subtracting Like Fractions

All fractions: S1

1) $\frac{8}{9} - \frac{4}{9} =$ ☐

2) $7\frac{1}{2} - 3\frac{1}{2} =$ ☐

3) $1\frac{9}{10} - \frac{14}{10} =$ ☐

4) $\frac{18}{11} - \frac{13}{11} =$ ☐

5) $\frac{7}{4} - \frac{2}{4} =$ ☐

6) $2\frac{7}{8} - \frac{5}{8} =$ ☐

7) $\frac{11}{15} - \frac{8}{15} =$ ☐

8) $8\frac{19}{20} - 3\frac{14}{20} =$ ☐

9) $6\frac{1}{3} - \frac{1}{3} =$ ☐

10) $\frac{15}{7} - \frac{9}{7} =$ ☐

11) $\frac{18}{14} - \frac{16}{14} =$ ☐

12) $9\frac{24}{27} - \frac{9}{27} =$ ☐

13) $8\frac{5}{6} - 1\frac{4}{6} =$ ☐

14) $\frac{17}{5} - \frac{2}{5} =$ ☐

Solving Proportions

Solve each proportion.

1) $\frac{2}{r} = \frac{12}{18}$

2) $\frac{50}{20} = \frac{5}{h}$

3) $\frac{16}{6} = \frac{3d}{9}$

4) $\frac{45}{27} = \frac{x}{3}$

5) $\frac{v}{84} = \frac{2}{21}$

6) $\frac{b}{8} = \frac{8}{64}$

7) $\frac{13}{3} = \frac{26}{c}$

8) $\frac{27}{15} = \frac{72}{a}$

9) $\frac{15}{n} = \frac{5}{12}$

10) $\frac{20}{8} = \frac{4k}{32}$

Reduce the Ratio

A) Reduce each ratio to its lowest term.

1) 8 : 12 = ☐

2) 15 : 9 = ☐

3) 24 : 18 = ☐

4) 16 : 14 = ☐

5) 15 : 45 = ☐

6) 2 : 4 = ☐

B) Write each ratio in its simplest form.

1) 24 oz : 12 oz = _____

2) 8 yd : 32 yd = _____

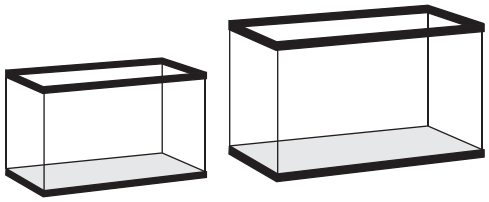
3) 15 in : 18 in = _____

4) 12 qt : 4 qt = _____

5) 2 pt : 10 pt = _____

6) 22 gal : 6 gal = _____

C) Evelyn bought two fish tanks with a capacity of 15 gallons and 30 gallons each. Write the ratio of the capacity of the smaller tank to the capacity of the larger tank. Reduce the ratio to its lowest term.



_____

One-Step Equations: Integers

Solve each equation.

1) $10 = z + 6$

2) $8y = 48$

3) $q - 12 = 1$

4) $18 = \frac{a}{2}$

5) $\frac{r}{3} = 7$

6) $11 = m - 4$

7) $t - 19 = 2$

8) $1 + s = 3$

9) $24 = 4c$

10) $\frac{v}{5} = 9$

Translating Phrases - Linear Expression

Translate each verbal phrase into an algebraic expression.

1) The sum of x and 2 _____

2) t divided by 8 _____

3) The product of 9 and m _____

4) Subtract 5 from c _____

5) Combine y and 7 _____

6) Three-sevenths of h _____

7) 3 multiplied by d _____

8) One-quarter added to n _____

9) b decreased by 10 _____

10) One-half of k _____

Translating Phrases: Two-Step Equations

Translate each verbal phrase into an algebraic equation.

1) Product of 2 and the difference between t and 1 is 14 _____

2) The quotient of e plus 2 and 5 results in 4 _____

3) Combine 3 and 5 times j gives 18 _____

4) Subtract 3 from quarter of g is 6 _____

5) 4 multiplied by the sum of y and 7 is equal to 16 _____

6) Twice of x diminished by 9 equals 5 times x _____

7) 3 divides the difference between h and 4 represents 5 _____

8) Triple b less 4 equals 8 _____

9) Half of k increased by 1 is equivalent to 7 _____

10) Subtract 4 from thrice of c is 7 times c _____

One-Step Equations - Integers

1) Natalie buys organic almonds priced at $77 from the grocery store. How much did she pay the cashier, if she received $23 in change?

_____

2) Lara and Mae participated in a quiz contest. They scored 23 points in all. If Lara scored 9 points, how many points did Mae score?

_____

3) John was gifted a pack of crayons. He gave 13 crayons to his friend Rhea and was left with 11 crayons. How many crayons did the pack contain?

_____

4) Smith and his friends are gaming online on a popular website. An hour later, 6 friends go offline. Five of them continue playing. How many of them were gaming online initially?

_____

5) Trevor takes up a test at school and completes it in an hour. The test has two sections. If he takes 35 minutes to complete the first section, how much time does he have left to complete the second section?

One-Step Equations - Integers

1) Jamie paid the rent well past the due date for the months of April, May and June. As a result, he had been charged a total of $75 as late fee. How much did he pay as late fee per month?

_____

2) The kindergarten section of Lehigh Valley has 12 classrooms. If each classroom can accomodate 15 kids, how many kids can the kindergarten section accomodate in all?

_____

3) Juan sells raffle tickets at a charity event for $6 each. How many tickets does he have to sell to make $114?

_____

4) Melanie works as a nanny and is paid $14 per hour. If she puts in 40 hours of work in 7 days, how much does she earn in a week?

_____

5) The non-fiction section of the Montgomery County Library has 17 racks. If each rack holds 528 books, what is the total collection of non-fiction books in the library?

One-Step Equations - MCQ

Read and interpret each word problem and choose the one-step equation that best represents the situation.

1) Charlie has x candies. He shares ten with Betsy and is left with 24 candies.

a) $10 + x = 24$

b) $x + 24 = 10$

c) $24 + x = -10$

d) $x - 10 = 24$

2) Carol's class has nine students on roll. x new students join her class and the number of students increases to 16.

a) $9 + x = 16$

b) $x - 16 = 9$

c) $16x = 9$

d) $16 + x = -9$

3) Clara has $67 in her piggy bank. She spends x dollars on a dog bowl which leaves her with $57.4.

a) $67 + x = 57.4$

b) $57.4 + x = 67$

c) $\frac{x}{67} = 57.4$

d) $x - 57.4 = 67$

4) Linda has y fancy pendants. Kathy owns 12 fancy pendants, which is four times as many as Linda.

a) $12y = 4$

b) $4y = 12$

c) $12 + y = 4$

d) $4 + y = 12$

5) Maria baked x cookies. She distributed the cookies equally among six of her neighbors. Each neighbor received 18 cookies.

a) $6x = 18$

b) $x - 6 = 18$

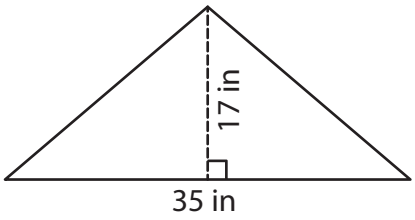
c) $\frac{x}{6} = 18$

d) $x - 18 = -6$

Area – Mixed Shapes

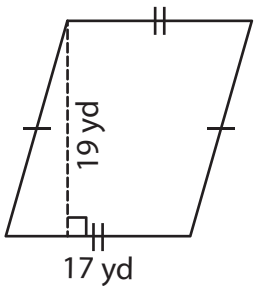
Find the area of each shape.

1)



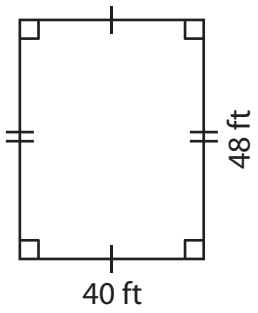
Area = _____

2)



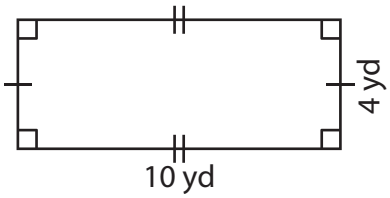
Area = _____

3)



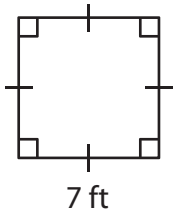
Area = _____

4)



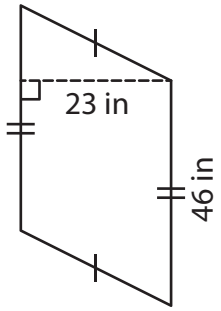
Area = _____

5)



Area = _____

6)



Area = _____

7) The side of a square measures 45 yards. What is the area of the square?

_____

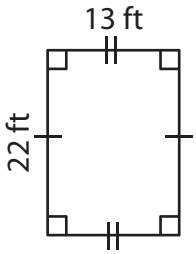
8) Find the area of the triangle whose base is 32 inches and height is 16 inches.

_____

Area – Mixed Shapes

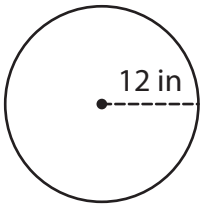
Find the area of each shape. (Use π = 3.14)

1)



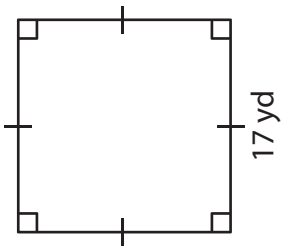
Area = _____

2)



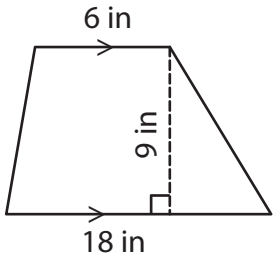
Area = _____

3)



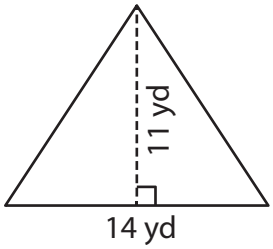
Area = _____

4)



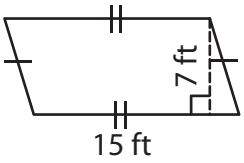
Area = _____

5)



Area = _____

6)



Area = _____

7) The base and height of a triangle are 9 yards and 10 yards respectively. Find the area of the triangle.

_____

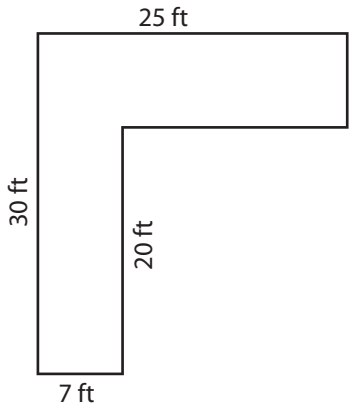
8) What is the area of the circle whose radius is 2 feet?

_____

Area of L-Shapes

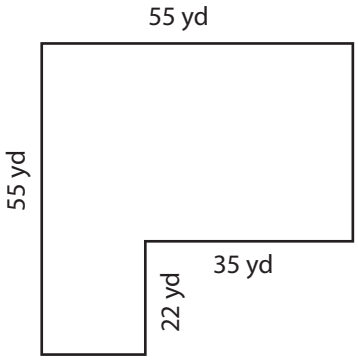
Find the area of each shape.

1)



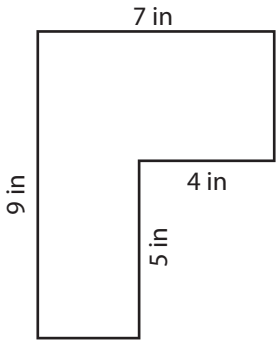
Area = _____

2)



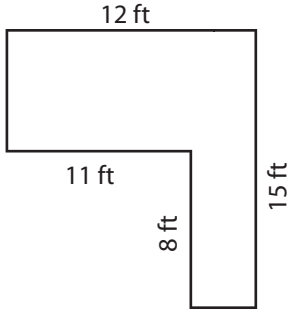
Area = _____

3)



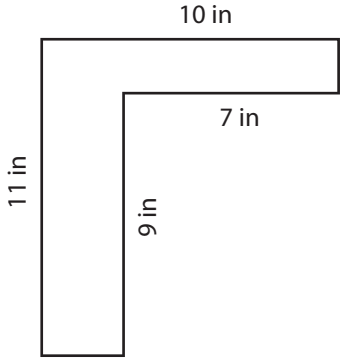
Area = _____

4)



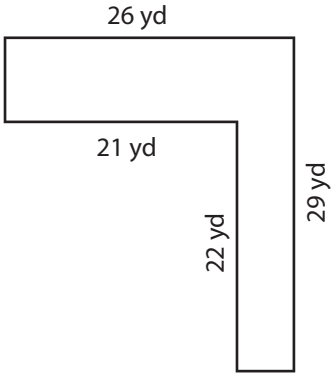
Area = _____

5)



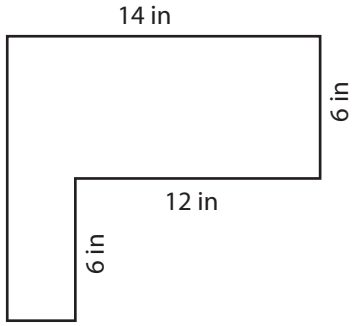
Area = _____

6)



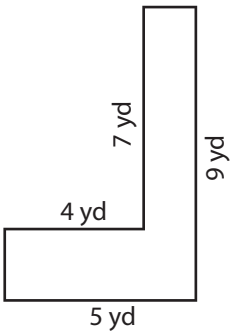
Area = _____

7)



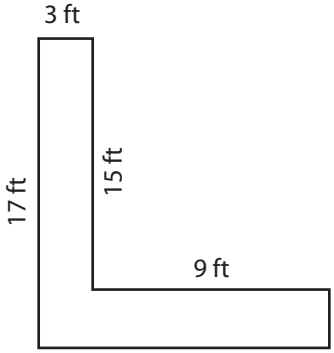
Area = _____

8)



Area = _____

9)

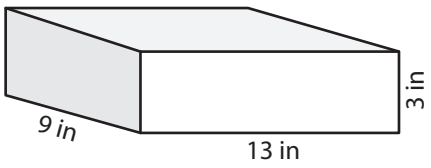


Area = _____

Surface Area - Rectangluar Prism

Find the surface area of each rectangular prism.

1)

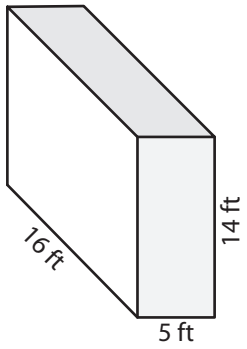


Surface Area = _____

2)

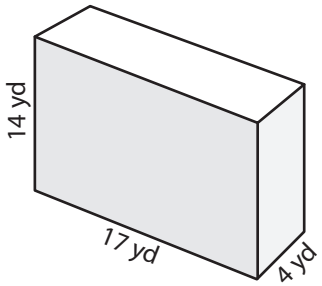
Surface Area = _____

3)



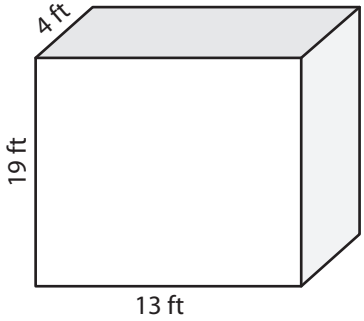
Surface Area = _____

4)



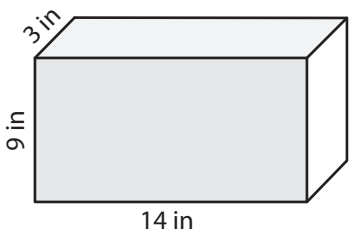
Surface Area = _____

5)



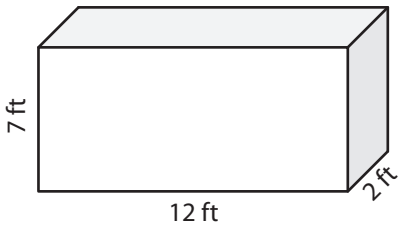
Surface Area = _____

6)



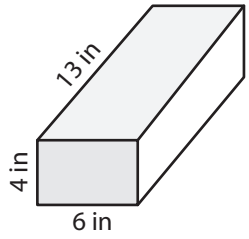
Surface Area = _____

7)



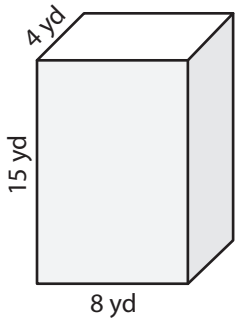
Surface Area = _____

8)



Surface Area = _____

9)



Surface Area = _____

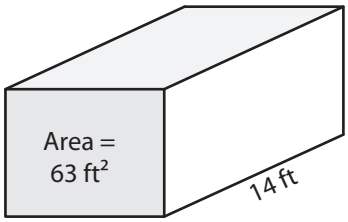
10) A rectangular-shaped box has the following dimensions: 12 yards, 8 yards, and 18 yards. What is the surface area of the box?

Surface Area = _____

Volume - Rectangular Prism

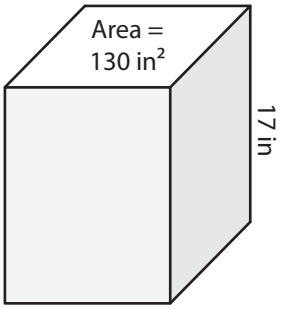
Find the volume of each rectangular prism.

1)



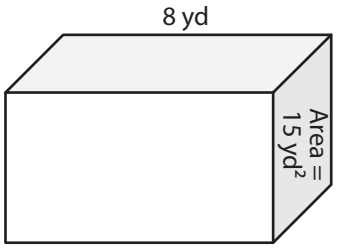
Volume = _____

2)



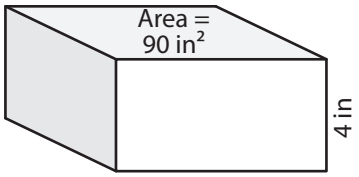
Volume = _____

3)



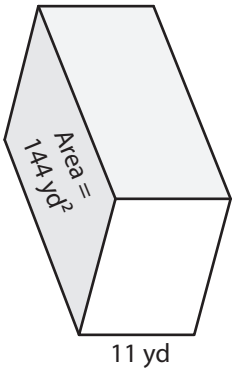
Volume = _____

4)



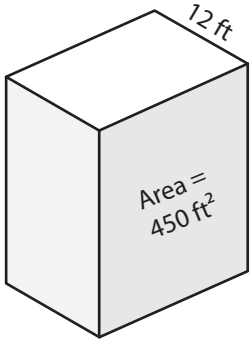
Volume = _____

5)



Volume = _____

6)



Volume = _____

7) A rectangular prism has a height of 22 yards and a base with area of 152 square yards. What is its volume?

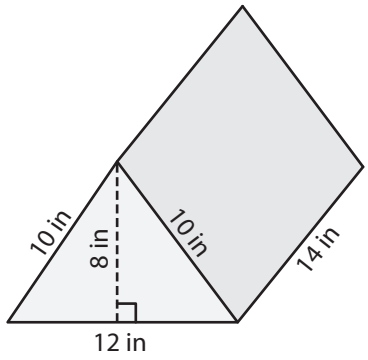
_____

8) Find the volume of the rectangular prism with a base area of 13 square feet and a height of 7 feet.

Surface Area of Triangular Prisms

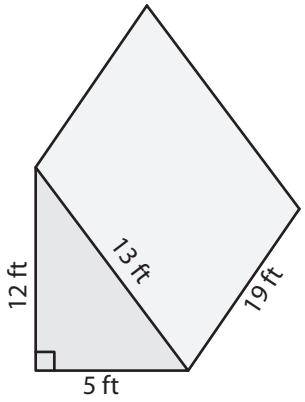
Find the surface area of each triangular prism.

1)



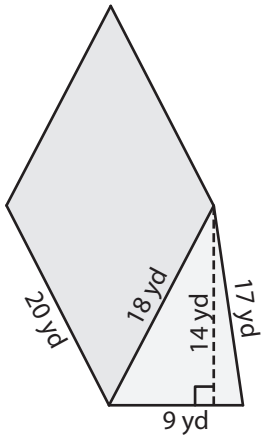
Surface Area = _____

2)



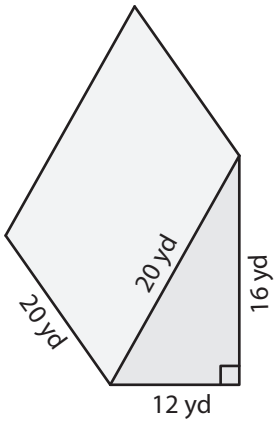
Surface Area = _____

3)



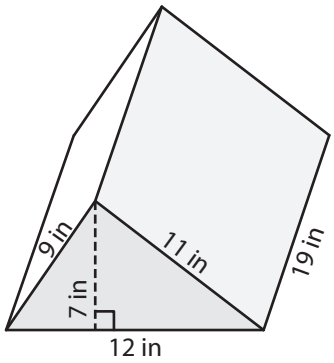
Surface Area = _____

4)



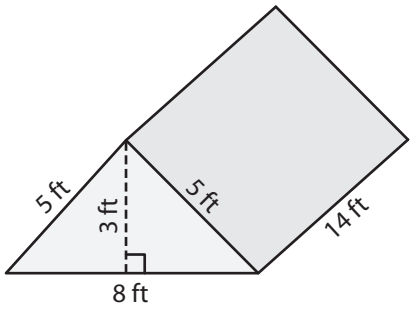
Surface Area = _____

5)



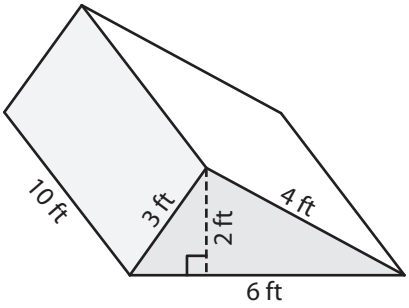
Surface Area = _____

6)



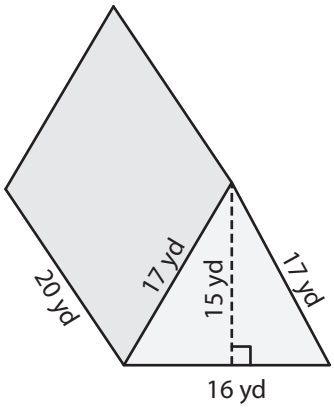
Surface Area = _____

7)



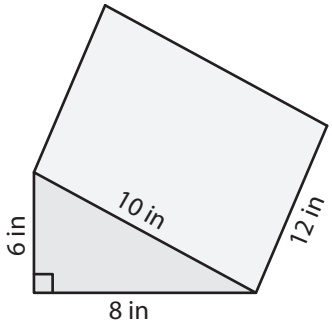
Surface Area = _____

8)



Surface Area = _____

9)



Surface Area = _____

Name: _____

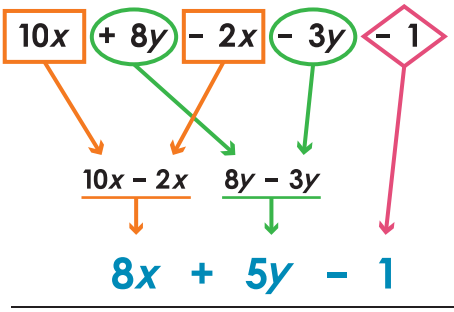
Equivalent Expressions

Combining Like Terms

Terms are separated by + or − signs in an expression.

Like terms may be combined according to the sign that separates them.

example: $10x + 8y - 2x - 3y - 1$



**Include symbol when identifying terms*

Draw shapes to identify like terms. Combine like terms.

ⓐ $7a + 3b - 2a - 5 + b$

_____

ⓑ $6x - 2x + 4 + 3y - y$

_____

ⓒ $5a + 3 - 6b - 1 - 3a$

_____

ⓓ $8c + 3d - 2 + d - 4c$

_____

ⓔ $12x - y + 5 - 9x + 1$

_____

ⓕ $a + 7b - 3b + 2a - 1$

_____

Name: _____

Equivalent Expressions

Using Distributive Property

example: $3(8x + 4) =$

$3(8x) + 3(4) =$

$24x + 12$

ⓐ $5(4y + 6) =$

$5(\_\_\_) + 5(\_\_\_) =$

_____

ⓑ $12(3b + 2) =$

$12(\_\_\_) + 12(\_\_\_) =$

_____

ⓒ $8(a + 4) =$

$8(\_\_\_) + 8(\_\_\_) =$

_____

ⓓ $5(2d + 3) =$

$5(\_\_\_) + 5(\_\_\_) =$

_____

ⓔ $4(8c + 7) =$

$4(\_\_\_) + 4(\_\_\_) =$

_____

ⓕ $9(3f + 5) =$

$9(\_\_\_) + 9(\_\_\_) =$

_____

ⓖ $2(6h + 8) =$

$2(\_\_\_) + 2(\_\_\_) =$

_____

ⓗ $6(5e + 6) =$

$6(\_\_\_) + 6(\_\_\_) =$

_____

ⓘ $7(3g + 10) =$

$7(\_\_\_) + 7(\_\_\_) =$

_____

ⓙ $11(4d + 8) =$

$11(\_\_\_) + 11(\_\_\_) =$

_____

Simplifying Linear Expressions

Simplify each expression.

1) $10x - 8x + 2 + 10$

2) $3a + 7 + 2(3 + a)$

3) $3(m - 5) + m$

4) $2s + 10 - 7s - 8 + 3s - 7$

5) $8c - 4 - 2c + 5$

6) $-4 + 7z + 3 - 2z$

7) $15 + 4(5y - 10)$

8) $2d + 17 - 3 - 2d + 4d$

9) $12n - 8 - 2n + 10 - 4$

10) $8(2k + 1 + 3k)$

11) $4(2b + 2) - 3$

12) $-4 + 8p - 6p - 5 + 20p$

Evaluating Integers

1) Substitute $x = 10$; $y = -8$; $z = 3$ and evaluate each expression.

i) $2x + 4$ ii) $-(-12) + \frac{z}{6}$ iii) $-x - (-y) - 14$

2) Substitute $p = 9$; $q = -5$ and evaluate each expression.

i) $q - 11 + (-p)$ ii) $q + p$ iii) $\frac{3q}{p} - 5$

3) Substitute $a = -13$; $b = -9$; $c = 2$ and evaluate each expression.

i) $\frac{18}{c} + b - (-a)$ ii) $-(-2a) + 16$ iii) $-13c + b - a$

4) Substitute $s = 4$; $t = 18$ and evaluate each expression.

i) $3s - (-t) - 11$ ii) $\frac{8t}{s} - (-20)$ iii) $10 + s$

Student Name: _____ **Score:**

Fractions into Decimals

Sheet 1

Convert each fraction into decimal:

1) $\frac{79}{10} =$ ⬭	2) $\frac{90}{100} =$ ⬭	3) $\frac{1735}{1000} =$ ⬭
4) $\frac{56}{100} =$ ⬭	5) $\frac{326}{1000} =$ ⬭	6) $\frac{235}{10} =$ ⬭
7) $\frac{752}{100} =$ ⬭	8) $\frac{135}{1000} =$ ⬭	9) $\frac{9}{100} =$ ⬭
10) $\frac{780}{1000} =$ ⬭	11) $\frac{200}{10} =$ ⬭	12) $\frac{12}{100} =$ ⬭
13) $\frac{56}{10} =$ ⬭	14) $\frac{77}{1000} =$ ⬭	15) $\frac{805}{10} =$ ⬭
16) $\frac{345}{100} =$ ⬭	17) $\frac{6394}{1000} =$ ⬭	18) $\frac{113}{100} =$ ⬭

Student Name: _____ **Score:**

Fractions into Decimals

Sheet 1

Convert each fraction into decimal:

1) $\frac{27}{2} =$	2) $\frac{3}{4} =$	3) $\frac{18}{5} =$
4) $\frac{7}{8} =$	5) $\frac{13}{10} =$	6) $\frac{47}{4} =$
7) $\frac{2}{5} =$	8) $\frac{29}{4} =$	9) $\frac{35}{2} =$
10) $\frac{17}{10} =$	11) $\frac{45}{8} =$	12) $\frac{39}{4} =$
13) $\frac{26}{8} =$	14) $\frac{30}{4} =$	15) $\frac{48}{5} =$
16) $\frac{49}{2} =$	17) $\frac{34}{5} =$	18) $\frac{3}{8} =$

Student Name: _____ **Score:**

Fractions into Percent

Sheet 1

Convert each fraction into percent:

1) $\frac{1}{10} = \_\_\_\_$	2) $\frac{13}{20} = \_\_\_\_$	3) $\frac{2}{5} = \_\_\_\_$
4) $\frac{11}{25} = \_\_\_\_$	5) $\frac{23}{50} = \_\_\_\_$	6) $\frac{1}{2} = \_\_\_\_$
7) $\frac{9}{20} = \_\_\_\_$	8) $\frac{18}{25} = \_\_\_\_$	9) $\frac{7}{10} = \_\_\_\_$
10) $\frac{12}{25} = \_\_\_\_$	11) $\frac{3}{4} = \_\_\_\_$	12) $\frac{1}{50} = \_\_\_\_$
13) $\frac{4}{5} = \_\_\_\_$	14) $\frac{13}{50} = \_\_\_\_$	15) $\frac{3}{20} = \_\_\_\_$
16) $\frac{24}{25} = \_\_\_\_$	17) $\frac{19}{20} = \_\_\_\_$	18) $\frac{7}{50} = \_\_\_\_$

Percent

Sheet 1

Find the percent of each number.

1) 68% of 700 = _____

2) 85% of 520 = _____

3) 40% of 85 = _____

4) 32% of 325 = _____

5) 2% of 250 = _____

6) 50% of 104 = _____

7) 75% of 396 = _____

8) 90% of 80 = _____

9) 25% of 64 = _____

10) 63% of 400 = _____

11) 56% of 475 = _____

12) 15% of 20 = _____

13) 48% of 50 = _____

14) 8% of 725 = _____

Percent

Solve each problem. Round your answer to the two decimal places.

1) What is 25% of 530? _____

2) 10 is 6% of what number? _____

3) 53% of what number is 384? _____

4) What % of 66 is 13? _____

5) What % of 369 is 26? _____

6) 92% of what number is 345? _____

7) 43 is 31% of what number? _____

8) What is 8% of 83? _____

9) What is 74% of 44? _____

10) 37% of what number is 19? _____

11) 105 is 42% of what number? _____

12) What % of 440 is 286? _____

13) What % of 69 is 55? _____

14) 91 is 10% of what number? _____

Order of Operations: Basic

L1ES1

Solve.

1) $8 + 96 \div 2$

Ans =

2) $23 \times 4 - 28$

Ans =

3) $42 \div 6 - 3$

Ans =

4) $17 \times 3 + 2$

Ans =

5) $79 - 12 \times 4$

Ans =

6) $3 \times 5 - 10$

Ans =

7) $90 \div 2 + 4$

Ans =

8) $8 + 10 \times 5$

Ans =

9) $3 + 5 \times 7$

Ans =

10) $42 - 15 \div 5$

Ans =

Order of Operations: Basic

L2ES1

Solve.

1) $5 + 8 \div 2 - 7$

Ans =

2) $12 \times 3 - 42 + 20$

Ans =

3) $4 \div 1 + 8 \times 2$

Ans =

4) $17 \times 3 + 15 \div 3$

Ans =

5) $29 - 6 \times 5 + 14$

Ans =

6) $31 \times 2 - 54 - 3$

Ans =

7) $16 \div 8 + 5 + 17$

Ans =

8) $28 + 4 \times 5 \div 5$

Ans =

9) $32 + 9 \times 6 - 84$

Ans =

10) $62 - 33 \div 3 + 14$

Ans =

Order of Operations: Exponents

L2ES1

Solve.

1) $6 - 12 \div 4 + 9^2 \times 2$

Ans =

2) $5^3 - 30 \div 3 + 4^2$

Ans =

3) $18 \div 6 + 8^2 \times 3 + 2^5$

Ans =

4) $48 \div 2 \times 5 + 7^2 - 3$

Ans =

5) $4 \times 5 + 3^3 - 15 \div 5$

Ans =

6) $9 \times 3^2 \div 9 - 4$

Ans =

7) $44 + 11 - 2^4 \div 2^3 \times 3$

Ans =

8) $8 \times 4 + 10^2 \div 5$

Ans =

9) $32 + 28 \div 4 \times 3^2 - 95$

Ans =

10) $6^3 - 52 + 9 \times 3$

Ans =

Nested parentheses in PEMDAS

L2DS1

Solve.

1) $72 \div ((6 - 10) \times 3^2) + 14 - 9$

Ans =

2) $2 + ((72 \div 6) \times 3 + 4^3) \div 5 + 12$

Ans =

3) $4 + ((12 + 84) \div (2^4 \times 3)) - 10$

Ans =

4) $11 \times 3^3 + ((18 + 2) \div 10) - 22 + 15$

Ans =

5) $11 - 16 \div 8 \times (9 + (4 - 5^2)) + 10$

Ans =

6) $34 - 17 + ((37 + 3) \times 8) \div 8^2$

Ans =

7) $7 \times ((12 - 8) + 2^5 - 1) \div 5 \times 2$

Ans =

8) $3^4 + ((18 + 4) - 12) \div 5 \times 4$

Ans =

9) $14 + ((4 \times 3 - 10^2) \div 11 - 9)$

Ans =

10) $1 + (54 \div (1 + 2^3) + 8) - 24$

Ans =

Order of Operations: Exponents

L1ES1

Solve.

1) $4^3 + 15 \div 3$

Ans =

2) $7 \times 2^4 - 28$

Ans =

3) $6^2 - 92 \div 4$

Ans =

4) $2 \times 3^3 + 10$

Ans =

5) $5^2 \times 6 - 85$

Ans =

6) $64 \div 2^5 + 24$

Ans =

7) $70 \div 5 - 2^3$

Ans =

8) $4^2 + 7 \times 2$

Ans =

9) $2 \times 3^3 + 1$

Ans =

10) $7 + 80 \div 4^2$

Ans =

Two-Step Equations: Integers

Solve each equation.

1) $5n + 5 = 45$

2) $\frac{y}{6} - 3 = -11$

3) $4(g - 1) = 24$

4) $\frac{v + 9}{15} = 0$

5) $-40 = 12x + 8$

6) $-2p - 3 = -19$

7) $13 = \frac{w - 14}{2}$

8) $36 = 1 + 7a$

9) $-9 = -11 + \frac{b}{8}$

10) $2q + 10 = 7q$

Two-Step Equations - MCQ

Read and interpret each word problem and choose the two-step equation that best represents the situation.

1) Janice had x color pencils in her box and shares them equally with her friend, Talia. Her brother gives her 2 more color pencils. Janice now has 3 pencils in her box.

a) $\frac{x}{2} + 3 = 2$

b) $2x - 2 = 3$

c) $\frac{x}{2} - 2 = 3$

d) $\frac{x}{2} + 2 = 3$

2) A meteorologist measured the average rainfall received in Cities A and B. Both cities received 11 inches of rainfall in total. While City A received x inches of rain, City B experienced three times the amount of rainfall than City A.

a) $x + 3x = 11$

b) $x - 3x = 11$

c) $3x - x = 11$

d) $11 = -3x - x$

3) Timothy spent a total of $68 at Macys. His purchases included a pair of jeans at $32 and 2 t-shirts at $x each.

a) $2x - 32 = 68$

b) $2x + 32 = 68$

c) $2x + 32 = -68$

d) $2x + 68 = 32$

4) A customer at a Mexican diner placed an order for 3 buritto bowls which was priced at $x each. He also ordered a plate of corn tacos at $12.96 and was billed for a total of $32.46.

a) $3x + 12.96 = 32.46$

b) $2x - 32.46 = 12.96$

c) $2x + 12.96 = 32.46$

d) $3x - 12.96 = 32.46$

5) Mr. Hewitt estimates the cost towards a fresh paint job for the exteriors of his home. He makes a provision for 12 gallons of paint priced at $x per gallon. The cost of paint supplies and miscellaneous expenses are $2264. The total estimated cost for the paint job is $2624..

a) $12x - 2264 = 2624$

b) $12x + 2624 = 2264$

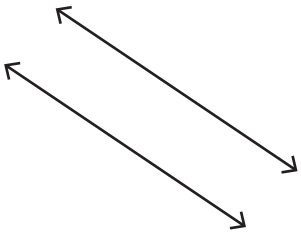
c) $12x + 2264 = 2624$

d) $12x + 2624 = -2264$

Multiple Choice

Identify each pair of lines as parallel, perpendicular or intersecting.

1)

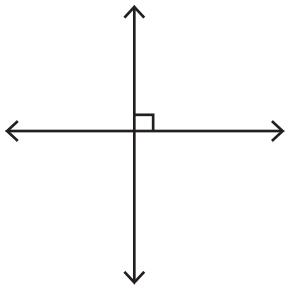


a) intersecting lines

b) parallel lines

c) perpendicular lines

2)

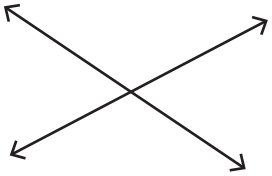


a) intersecting lines

b) parallel lines

c) perpendicular lines

3)

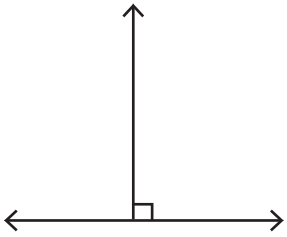


a) intersecting lines

b) parallel lines

c) perpendicular lines

4)

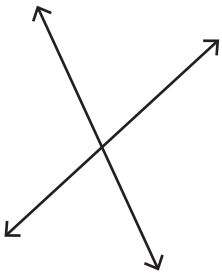


a) intersecting lines

b) parallel lines

c) perpendicular lines

5)

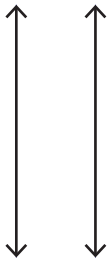


a) intersecting lines

b) parallel lines

c) perpendicular lines

6)



a) intersecting lines

b) parallel lines

c) perpendicular lines

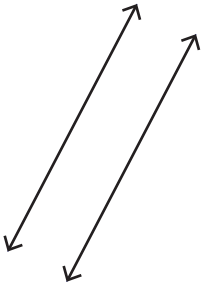
7)

a) intersecting lines

b) parallel lines

c) perpendicular lines

8)

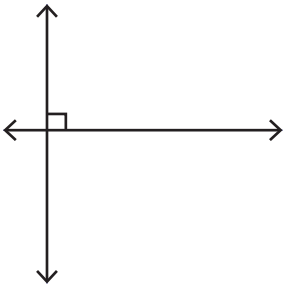


a) intersecting lines

b) parallel lines

c) perpendicular lines

9)



a) intersecting lines

b) parallel lines

c) perpendicular lines