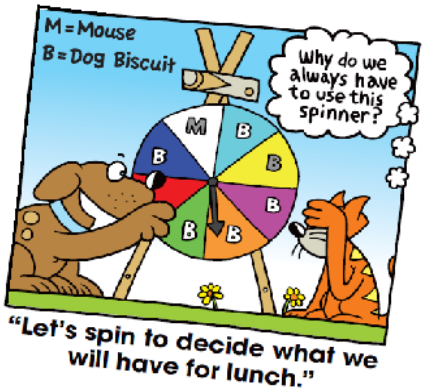
Race to the Finish!

Materials needed:

- game pieces
- game board
- spinner
- game cards
- lined paper
- solutions paper (folded in half to conceal the answers)

Directions:

- Each player starts with his or her game piece on the START position of the game board.
- If you are the first player, you will spin the spinner and choose the top card from the game card pile corresponding to the color on the spinner.
- You will work out the problem on lined paper. Once you have arrived at a solution, the group member to your left will check your answer on the solutions paper. If you get the answer correct, you may advance to the next space of the color you spun on the wheel. If you do not get the answer correct, you and your group members must solve the problem together, but you may not advance on this turn. Once your turn is complete, the player to your right may have a chance.
- The player who reaches the FINISH first is the winner! The other players keep playing until each player has reached the FINISH.



BIG IDEAS LEARNING®

Race to the Finish Review Game

The spinner is optional. Students can shuffle all the cards and draw a card from the top of the pile.

Objectives:
The student will
A. write and simplify expressions
B. write and solve equations
C. write and simplify fractions, decimals, and percents
D. solve problems involving fractions, decimals, and percents
E. use geometric formulas to find area, perimeter, circumference, radius, length, etc.

Materials:
Each group will need

- student directions
- game pieces (foil wrapped candy or small figurines)
- a game board
- a spinner
- game cards (printed and cut into quarters)
- lined paper
- solutions papers (folded in half or placed in a folder to conceal the answers)

Procedure:

The students will work in a group of 2-4 students. The more students in a group, the longer the activity will take.

Each player starts with his or her game piece on the START position of the game board.

The first player, will spin the spinner and choose the top card from the game card pile corresponding to the color on the spinner.

The student will work out the problem on lined paper. The group member to the left of the student will check his or her answer on the solutions paper. If the answer is correct, the student may advance to the next space of the color spun on the wheel. If the answer is incorrect, the group members must work together to solve the problem, but the student may not advance on this turn. Once the turn is complete, the player to the right may have a chance.

The player who reaches the FINISH first is the winner. The activity is completed when each group has reached the FINISH.

This activity should take about 30 minutes.

Review Game Solutions

Percents

P1	1.64, $1\frac{16}{25}$
P2	30
P3	\$8.05
P4	5.4
P5	0.002, $\frac{1}{500}$
P6	80
P7	0.3125, 31.25%
P8	45 students
P9	0.15, 15%
P10	21
P11	$\frac{17}{25}$
P12	$\frac{7}{20}$, 35%
P13	1.375, 137.5%
P14	19.2
P15	$\frac{9}{50}$, 0.18
P16	\$4.70
P17	$\frac{7}{25}$, 28%
P18	0.25
P19	\$5.02
P20	6%, 0.062, $\frac{61}{100}$

Geometry

G1	88 in.
G2	8 in.
G3	12 mm
G4	$6x - 4$
G5	18 ft
G6	10 m
G7	314 ft^2
G8	3.72 $in.^2$
G9	$4\frac{1}{6}$ ft^2
G10	288 $in.^2$
G11	$5x + 15$
G12	264 mi
G13	28.26 cm^2
G14	154 mm^2
G15	$r = 5$ yd
G16	8 mm
G17	78.5 yd^2
G18	$s = 10$ in.
G19	21 m
G20	24 cm^2

Review Game Solutions

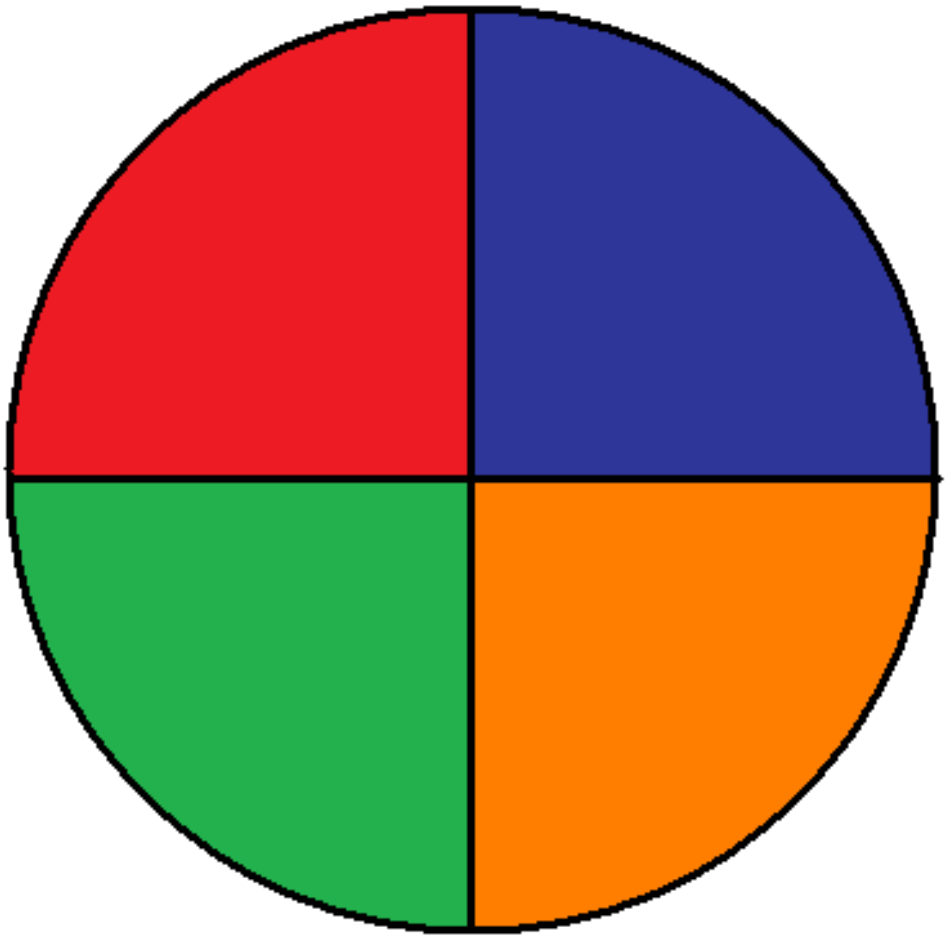
Expressions

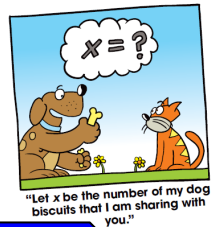
E1	17
E2	$13 \bullet n$
E3	$1\frac{1}{2}$
E4	2
E5	16
E6	$129.60
E7	10
E8	$5a - 15$
E9	8
E10	$3\frac{5}{6}$
E11	$7.25h$
E12	2.5
E13	$3\frac{3}{20}$
E14	$z + 14$
E15	11
E16	$5\frac{1}{3}$
E17	1
E18	$8.50
E19	205
E20	$3(n+2) = 3n + 6$

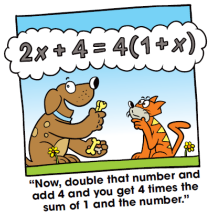
Equations

Q1	$x = 12$
Q2	$n + 15 = 23$
Q3	$y = 11$
Q4	$y = 3x$
Q5	$p = 9$
Q6	$a \div 7 = 12$
Q7	$a = 28$
Q8	$y = x + 2$
Q9	$m = 8$
Q10	$p - 5 = 30$
Q11	$x = 5.2$
Q12	$b = 5.5$
Q13	$b = 22$
Q14	$6z = 24$
Q15	$y = 2\frac{1}{3}$ or $\frac{7}{3}$
Q16	$m = 4.2$
Q17	$y = 14$
Q18	$25 = \frac{1}{4}y$
Q19	$c = 2$
Q20	$x = 6$

Race to the Finish Review Game Spinner







Finish!

BIG IDEAS LEARNING®

Red Book Review Game

Equations

Solve $x + 3 = 15$.

Q1

Review Game
Red Book
Big Ideas Learning

Equations

Write the word sentence as an equation.

The sum of a number n and 15 is 23.

Q2

Review Game
Red Book
Big Ideas Learning

Equations

What is the value of $y = 2x + 7$ when $x = 2$?

Q3

Review Game
Red Book
Big Ideas Learning

Equations

Write an equation for the function shown in the table.

x	1	2	3	4	5
y	3	6	9	12	15

Q4

Review Game
Red Book
Big Ideas Learning

Equations

Solve $4 + p = 13$.

Q5

Review Game
Red Book
Big Ideas Learning

Equations

Write the word sentence as an equation.

The quotient of a number a and 7 is 12.

Q6

Review Game
Red Book
Big Ideas Learning

Equations

Solve $\frac{a}{4} = 7$.

Q7

Review Game
Red Book
Big Ideas Learning

Equations

Write an equation for the function shown in the table.

x	1	2	3	4	5
y	3	4	5	6	7

Q8

Review Game
Red Book
Big Ideas Learning

Equations

Solve $18 = m + 10$.

Q9

Review Game
Red Book
Big Ideas Learning

Equations

Write the word sentence as an equation.

The number p decreased by 5 is 30.

Q10

Review Game
Red Book
Big Ideas Learning

Equations

Solve $3.5x = 18.2$.

Q11

Review Game
Red Book
Big Ideas Learning

Equations

Solve $4b - 3 = 19$.

Q12

Review Game
Red Book
Big Ideas Learning

Equations

Solve $b - 9 = 13$.

Q13

Equations

Write the word sentence as an equation.

The product of 6 and a number z is 24.

Q14

Equations

What is the value of $y = \frac{1}{3}x + \frac{2}{3}$ when $x = 5$.

Q15

Equations

Solve $\frac{m}{2} + 4.1 = 6.2$.

Q16

Equations

Solve $7 = y - 7$.

Q17

Review Game
Red Book
Big Ideas Learning

Equations

Write the word sentence as an equation.

25 is one-fourth of a number y.

Q18

Review Game
Red Book
Big Ideas Learning

Equations

Solve $24c - 5 = 43$.

Q19

Review Game
Red Book
Big Ideas Learning

Equations

Solve $15 + \frac{x}{3} = 17$.

Q20

Review Game
Red Book
Big Ideas Learning

Expressions

Evaluate $3x - 4$ when $x = 7$.

E1

Review Game
Red Book
Big Ideas Learning

Expressions

Write the phrase as an expression.

The product of 13 and a number n.

E2

Review Game
Red Book
Big Ideas Learning

Expressions

Simplify $2\frac{1}{3} \div 1\frac{5}{9}$.

E3

Review Game
Red Book
Big Ideas Learning

Expressions

Simplify $\frac{3}{4} + \frac{5}{6} \div \frac{2}{3}$.

E4

Review Game
Red Book
Big Ideas Learning

Expressions

Evaluate $x^2 + y$ when $x = 3$ and $y = 7$.

E5

Expressions

Your monthly cell phone bill is $32.40. How much do you owe after 4 months of service?

E6

Expressions

Simplify $\frac{5}{6} \times 12$.

E7

Expressions

Use the distributive property to simplify $5(a - 3)$.

E8

Expressions

Evaluate $36 \div a + b$ when $a = 9$ and $b = 4$.

E9

Review Game
Red Book
Big Ideas Learning

Expressions

Simplify $2\frac{3}{10} \times 1\frac{2}{3}$.

E10

Review Game
Red Book
Big Ideas Learning

Expressions

You earn $7.25 per hour at hour at your summer job. Write an expression for the amount of money you earn in one week.

E11

Review Game
Red Book
Big Ideas Learning

Expressions

Evaluate the expression $a \div b$ when $a = 7.75$ and $b = 3.1$.

E12

Review Game
Red Book
Big Ideas Learning

Expressions

Simplify $1\frac{2}{5} \div \frac{4}{9}$.

E13

Expressions

Write the phrase as an expression.

Fifteen more than a number z.

E14

Expressions

Find the mean number of text messages.

Text messages			
18	5	3	8
21	15	7	11

E15

Expressions

Simplify $8 \div 1\frac{1}{2}$.

E16

Expressions

What is the value of the expression $7x + 2y - 3z$ when $x = 1$, $y = 0$, and $z = 2$?

E17

Review Game
Red Book
Big Ideas Learning

Expressions

Five tickets to the movies costs $42.50. What is the cost of one ticket?

E18

Review Game
Red Book
Big Ideas Learning

Expressions

Simplify $4.1 \div 0.02$.

E19

Review Game
Red Book
Big Ideas Learning

Expressions

Write the phrase as an expression.

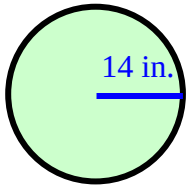
The product of 3 and the sum of a number n and 2.

E20

Review Game
Red Book
Big Ideas Learning

Geometry

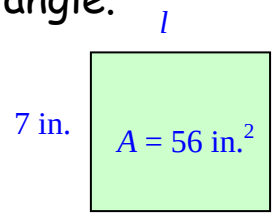
Use the formula $C = 2\pi r$ and $\pi \approx \frac{22}{7}$ to find the circumference of the circle.



G1

Geometry

Use the formula $A = lw$ to find the length of the rectangle.



G2

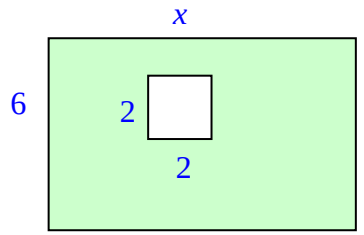
Geometry

The perimeter of a square is 48 millimeters. What is the length of one side?

G3

Geometry

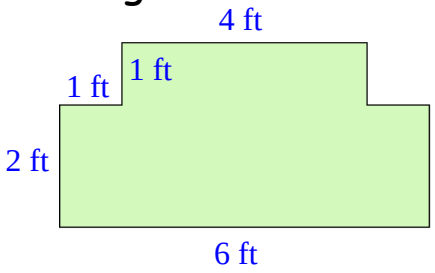
Write a formula for the area of the shaded region in terms of x.



G4

Geometry

Find the perimeter of the garden shown.

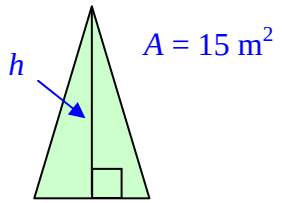


G5

Review Game
Red Book
Big Ideas Learning

Geometry

Find the height of the triangle.

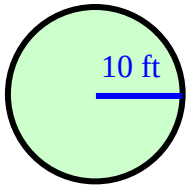


G6

Review Game
Red Book
Big Ideas Learning

Geometry

Use the formula $A = \pi r^2$ and $\pi \approx 3.14$ to find the area of the circle.

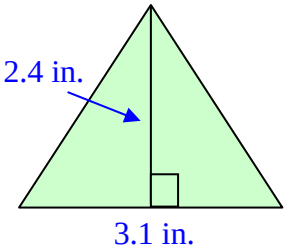


G7

Review Game
Red Book
Big Ideas Learning

Geometry

Use the formula $A = bh \div 2$ to find the area of the triangle.

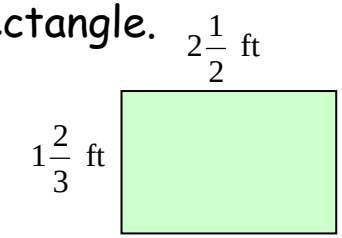


G8

Review Game
Red Book
Big Ideas Learning

Geometry

Use the formula $A = lw$ to find the area of the rectangle.

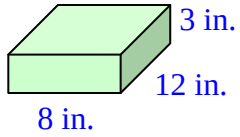


G9

Review Game
Red Book
Big Ideas Learning

Geometry

Use the formula $V = lwh$ to find the volume of the shipping box.

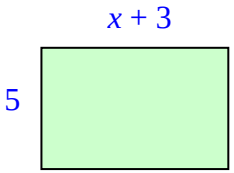


G10

Review Game
Red Book
Big Ideas Learning

Geometry

Use the distributive property to write and simplify an expression for the area of the rectangle.

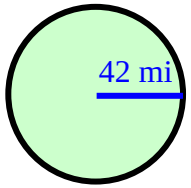


G11

Review Game
Red Book
Big Ideas Learning

Geometry

Use the formula $C = 2\pi r$ and $\pi \approx \frac{22}{7}$ to find the circumference of the circle.



G12

Review Game
Red Book
Big Ideas Learning

Geometry

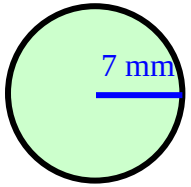
What is the area of a circle with a diameter of 6 cm? (Use $\pi \approx 3.14$.)

G13

Review Game
Red Book
Big Ideas Learning

Geometry

Use the formula $A = \pi r^2$ and $\pi \approx \frac{22}{7}$ to find the area of the circle.

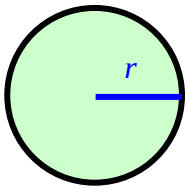


G14

Review Game
Red Book
Big Ideas Learning

Geometry

Use the formula $C = 2\pi r$ and $\pi \approx 3.14$ to find the radius of the circle.



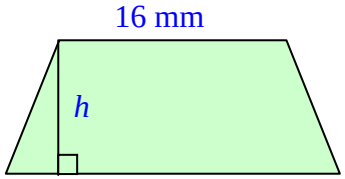
$C = 31.4$ yd

G15

Review Game
Red Book
Big Ideas Learning

Geometry

Use the formula $A = h(b + B) \div 2$ to find the height of the trapezoid.



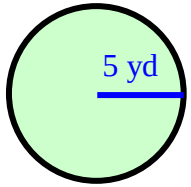
$A = 144$ mm^2

G16

Review Game
Red Book
Big Ideas Learning

Geometry

Use the formula $A = \pi r^2$ and $\pi \approx 3.14$ to find the area of the circle.

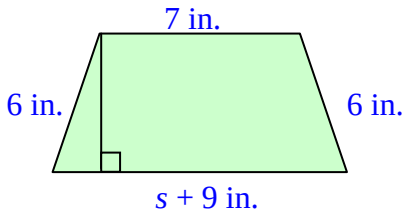


G17

Review Game
Red Book
Big Ideas Learning

Geometry

What is the value of s if the perimeter of the trapezoid is 38 inches?

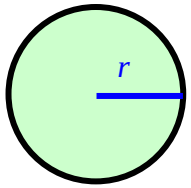


G18

Review Game
Red Book
Big Ideas Learning

Geometry

Use the formula $C = 2\pi r$ and $\pi \approx \frac{22}{7}$ to find the radius of the circle.



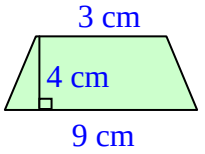
$C \approx 132$ m

G19

Review Game
Red Book
Big Ideas Learning

Geometry

Use the formula $A = h(b + B) \div 2$ to find the area of the trapezoid.



G20

Review Game
Red Book
Big Ideas Learning

Percents

Write 164% as a decimal and as a fraction in simplest form.

P1

Review Game
Red Book
Big Ideas Learning

Percents

Use a fraction to find 75% of 40.

P2

Review Game
Red Book
Big Ideas Learning

Percents

An online clothing store charges 10% of your total bill for shipping. How much is shipping if you spend $80.46?

P3

Review Game
Red Book
Big Ideas Learning

Percents

What is 15% of 36?

P4

Review Game
Red Book
Big Ideas Learning

Percents

Write 0.2% as a decimal and as a fraction in simplest form.

P5

Review Game
Red Book
Big Ideas Learning

Percents

What is 125% of 64?

P6

Review Game
Red Book
Big Ideas Learning

Percents

Write $\frac{5}{16}$ as a decimal and as a percent.

P7

Review Game
Red Book
Big Ideas Learning

Percents

At your school, 15% of the students are left-handed. If there are 300 students in your school, about how many are left-handed?

P8

Review Game
Red Book
Big Ideas Learning

Percents

Write $\frac{3}{20}$ as a decimal and as a percent.

P9

Review Game
Red Book
Big Ideas Learning

Percents

What is 30% of 70?

P10

Review Game
Red Book
Big Ideas Learning

Percents

If 68% of your song is downloaded, what fraction of your song is downloaded?

P11

Review Game
Red Book
Big Ideas Learning

Percents

Write 0.35 as a fraction and a percent.

P12

Review Game
Red Book
Big Ideas Learning

Percents

Write the mixed number $1\frac{3}{8}$ as a decimal and a percent.

P13

Review Game
Red Book
Big Ideas Learning

Percents

What is 24% of 80?

P14

Review Game
Red Book
Big Ideas Learning

Percents

Write 18% as a decimal and a fraction in simplest form.

P15

Review Game
Red Book
Big Ideas Learning

Percents

If you leave your server a 20% tip on a meal that costs $23.50, how much do you leave for a tip?

P16

Review Game
Red Book
Big Ideas Learning

Percents

Write the decimal 0.28 as a percent and a fraction in simplest form.

P17

Review Game
Red Book
Big Ideas Learning

Percents

What is 0.5% of 50?

P18

Review Game
Red Book
Big Ideas Learning

Percents

You want to give a taxi driver a 20% tip. How much should you tip the driver if the fare is $25.10?

P19

Review Game
Red Book
Big Ideas Learning

Percents

Order the numbers $\frac{61}{100}$, 6%, and 0.062 from least to greatest.

P20

Review Game
Red Book
Big Ideas Learning