

Candy Caper

G5: Decimals



Teacher resources

Preparation

- Print pages 3-10 for students.
- Feel free to create a booklet or to give students one worksheet at a time to solve.
- Students should always have page 4, “Possible Suspects,” nearby to cross off rows as they solve the clues.

How to Use

- Read through the story on page 3, “The Candy Caper,” to create excitement over helping solve the mystery!
- Explain that from each worksheet, students will solve a clue. They will use that clue to cross off some possible suspects on page 4 until only one is left.
- When they are done, students should fill out the “Final Report” on page 10 for you to check!

Answers:

- Solutions are on pages 11-22. Following each worksheet’s solution is a page with the relevant rows crossed off. The final solution is on page 22.

Awards

- Two copies of an awards certificate are available on page 23. Consider having students complete all problems (even if they solve the mystery early) to earn the award!

The Candy Caper

Hello guys, I am glad you are here. Gig and I sure could use your help. One of my favorite candy shops, Cassie's Candy Craze, has been broken into and the candy has been stolen.

I don't know who would do such a thing!

We could use your help. There were quite a few suspects that were near the scene of the crime. We know one of them took the candy.

We just don't know which one did it. We need your math detective skills to solve this Candy Caper.

Will you help us?

Thank you for your help. Do your best detective work and find the culprit so we can solve this mystery.

I will just make sure the evidence is safe in my tummy while you find the candy thief.
Good Luck!



Possible Suspects

	Male/Female	Wears Glasses?	Hair Color	Shirt Color	Shoe Size
Al Mondjoi	male	yes	light	red	big
Buster F. Inger	male	yes	dark	red	big
Candace Dulce	female	yes	dark	blue	small
Cara Mello	female	no	light	blue	small
Charles Tunshew	male	no	dark	green	big
Clark Barre	male	yes	dark	green	big
Emmy Nemms	female	no	dark	blue	small
Henry Oh	male	no	dark	blue	small
Lee Monhedd	male	no	light	red	big
Lynn D. Taah	female	yes	dark	green	small
Marcy Bahres	female	no	dark	green	small
Mary Jane Miller	female	yes	light	green	big
Mike Enike	male	yes	dark	blue	small
Patty Yorkshire	female	yes	light	red	big
Peach B. Losum	female	no	light	green	small
Roe Lowe	female	no	dark	blue	big
Starr Burrst	female	yes	light	red	small
Tim Tamme	male	no	light	red	big

Add and Subtract Decimals - Clue 1

Find the first clue by completing the addition and subtraction problems below. Match your answers to put the letter in the box with the matching number (there may be more than one).

--	--	--	--	--

9.46 0.10 1.73 2.00 1.73

--	--	--

9.87 1.33 3.78

--

1.33

--	--	--	--

5.12 1.33 2.00 2.82

--	--	--	--

0.10 1.33 0.71 2.00

f				
----------	--	--	--	--

4.89 4.02 9.72 5.12

--	--	--	--	--

3.78 9.46 4.02 1.24 2.82

--	--

0.71 9.72

--	--	--

9.46 0.10 1.73

--	--	--	--

5.12 4.89 4.89 2.00

$\begin{array}{r} 1.45 \\ + 2.33 \\ \hline \end{array}$	$\begin{array}{r} 0.38 \\ + 4.51 \\ \hline \end{array}$	$\begin{array}{r} 4.82 \\ + 5.05 \\ \hline \end{array}$	$\begin{array}{r} 3.07 \\ + 6.65 \\ \hline \end{array}$	$\begin{array}{r} 3.68 \\ + 0.34 \\ \hline \end{array}$	$\begin{array}{r} 7.06 \\ + 2.40 \\ \hline \end{array}$	$\begin{array}{r} 2.05 \\ + 3.07 \\ \hline \end{array}$
---	---	---	---	---	---	---

--	--	--	--	--	--	--

S O W N U T D

$\begin{array}{r} 4.36 \\ - 3.12 \\ \hline \end{array}$	$\begin{array}{r} 0.75 \\ - 0.04 \\ \hline \end{array}$	$\begin{array}{r} 1.83 \\ - 1.73 \\ \hline \end{array}$	$\begin{array}{r} 5.24 \\ - 3.24 \\ \hline \end{array}$	$\begin{array}{r} 2.98 \\ - 1.25 \\ \hline \end{array}$	$\begin{array}{r} 3.05 \\ - 0.23 \\ \hline \end{array}$	$\begin{array}{r} 6.72 \\ - 5.39 \\ \hline \end{array}$
---	---	---	---	---	---	---

--	--	--	--	--	--	--

C I H R E K A

Multiply Decimals - Clue 2

Another detective took statements from some witnesses, but only one is true. Complete the multiplication problems below and cross out each box that matches a correct answer. The only box left contains the correct statement!

3.12 "I someone with light colored hair acting suspicious."	3.72 "A man knocked into me as he ran out of the store with a large bag."	0.63 "I noticed a piece of red fabric torn on one of the shelves."	1.05 "I heard that there was a whole group of people that broke in."
23.94 "There was someone with glasses asking if there was a back door."	16.8 "There was a man with a dog who left without buying anything."	26 "There was a kid in a blue shirt who came back into the store 3 times."	4.39 "I think I saw a woman secretly putting some candy into her backpack."
22.32 "I don't remember anyone with glasses in the store. Does that help?"	21 "I didn't see anything suspicious. I'm sure it was just a mistake."	18.6 "There were some big footprints out on the sidewalk. But I don't know if they were from today."	3 "I think I saw some kids take off on bikes after the police were called."

$2 \times 8.4 = \underline{\hspace{2cm}}$

$6.3 \times 3.8 = \underline{\hspace{2cm}}$

$3.25 \times 8 = \underline{\hspace{2cm}}$

$3.1 \times 6 = \underline{\hspace{2cm}}$

$5 \times 0.6 = \underline{\hspace{2cm}}$

$9 \times 0.07 = \underline{\hspace{2cm}}$

$5.0 \times 4.2 = \underline{\hspace{2cm}}$

$0.93 \times 4 = \underline{\hspace{2cm}}$

$7.2 \times 3.1 = \underline{\hspace{2cm}}$

$1.3 \times 2.4 = \underline{\hspace{2cm}}$

$2.1 \times 0.5 = \underline{\hspace{2cm}}$

Divide Decimals - Clue 3

As you're investigating you find the third clue! Help figure it out by solving the division equations. Match your answers to put the letter in the box with the matching number (there may be more than one).

6	3	10.5	6	2.7	2.7

0.05	40	40	1.6	5	1.02	1.2	11	1.6

1.2	3

1.2	11

1.6	1.16	0.23

8	6	1.02	2	0.23	11

40	200	1.6	3	1.2	2	0.23

$$5 \div 2.5 = \underline{\hspace{2cm}}$$

D

$$4.5 \div 1.5 = \underline{\hspace{2cm}}$$

S

$$7.5 \div 1.25 = \underline{\hspace{2cm}}$$

A

$$8 \div 0.2 = \underline{\hspace{2cm}}$$

O

$$0.69 \div 3 = \underline{\hspace{2cm}}$$

E

$$0.01 \div 0.2 = \underline{\hspace{2cm}}$$

F

$$3.6 \div 3 = \underline{\hspace{2cm}}$$

I

$$2.04 \div 2 = \underline{\hspace{2cm}}$$

R

$$8 \div 5 = \underline{\hspace{2cm}}$$

T

$$4.64 \div 4 = \underline{\hspace{2cm}}$$

H

$$6 \div 0.03 = \underline{\hspace{2cm}}$$

U

$$8.64 \div 3.2 = \underline{\hspace{2cm}}$$

L

$$5.5 \div 0.5 = \underline{\hspace{2cm}}$$

N

$$1.25 \div 0.25 = \underline{\hspace{2cm}}$$

P

$$21 \div 2 = \underline{\hspace{2cm}}$$

M

$$9.6 \div 1.2 = \underline{\hspace{2cm}}$$

G

Comparing Decimals - Clue 4

You get a chance to review the security footage! In the grid below are a bunch of clues from the tape, but only one is correct. Cross off all the boxes that do not compare the numbers correctly. The one with the correct comparison has the correct clue.

$1.5 < 1.05$ The suspect escaped out the back door with her skateboard.	$26.0 = 2.60$ There's a women in the second aisle with a huge backpack and small sandals.	$6.09 < 6.90$ With a closer look, you can see that the suspect isn't wearing glasses.
$0.97 > 3.25$ It's hard to see, but it looks like a woman in glasses with a blue shirt is the suspect.	$9.45 < 5.87$ There's a woman who entered the store 3 times but didn't buy anything.	$0.20 > 2$ In the chocolate aisle, someone with a big hat is emptying the shelves into her purse.
$21.9 < 9.19$ The tape shows someone suspicious with a hat and huge sunglasses.	$15.0 = 150$ It's really hard to tell what the suspect is wearing.	$46.10 > 46.1$ A woman in jeans and a red shirt can be seen sneaking candy into her pockets.
$0.80 < 0.08$ The suspect clearly has a large purse and is wearing high heels.	$45.0 > 321$ There's a man with a striped shirt passing candy to a woman in a blue shirt.	$16.3 > 50.3$ The suspect's shirt is either red or green.

Write Decimals - Clue 5

It seems like you almost have the culprit but there's just one more clue you need...and there it is! The suspect's shirt looks like it got caught in the door and a piece tore off. Find the number that matches the written out decimal below to find out the color of the shirt.

five hundred twelve and seven tenths

52.17
yellow

51.27
blue

512.07
green

5,127.0
green

52.7
green

521.7
red

52.70
purple

512.17
blue

52.07
green

512.70
blue

512.71
blue

521.07
blue

521.70
green

521.70
green

Final Report



Detective Name: _____

Your Solution:

The suspect who stole all the candy from Cassie's Candy Craze is

_____.

Clue
Checklist:

Clue 1

Clue 2

Clue 3

Clue 4

Clue 5

Teacher Check:

Well done! You helped solve the
Candy Caper! Great work!!

Oops! That's not the culprit. Go
back, check your clues, and try
again!

The Candy Caper: Solution

Add and Subtract Decimals - Clue 1

Find the first clue by completing the addition and subtraction problems below. Match your answers to put the letter in the box with the matching number (there may be more than one).

T	h	e	r	e
---	---	---	---	---

9.46 0.10 1.73 2.00 1.73

w	a	s
---	---	---

9.87 1.33 3.78

a

1.33

d	a	r	k
---	---	---	---

5.12 1.33 2.00 2.82

h	a	i	r
---	---	---	---

0.10 1.33 0.71 2.00

f	o	u	n	d
---	---	---	---	---

4.89 4.02 9.72 5.12

s	t	u	c	k
---	---	---	---	---

3.78 9.46 4.02 1.24 2.82

i	n
---	---

0.71 9.72

t	h	e
---	---	---

9.46 0.10 1.73

d	o	o	r
---	---	---	---

5.12 4.89 4.89 2.00

$\begin{array}{r} 1.45 \\ + 2.33 \\ \hline \end{array}$	$\begin{array}{r} 0.38 \\ + 4.51 \\ \hline \end{array}$	$\begin{array}{r} 4.82 \\ + 5.05 \\ \hline \end{array}$	$\begin{array}{r} 3.07 \\ + 6.65 \\ \hline \end{array}$	$\begin{array}{r} 3.68 \\ + 0.34 \\ \hline \end{array}$	$\begin{array}{r} 7.06 \\ + 2.40 \\ \hline \end{array}$	$\begin{array}{r} 2.05 \\ + 3.07 \\ \hline \end{array}$
---	---	---	---	---	---	---

3.78	4.89	9.87	9.72	4.02	9.46	5.12
------	------	------	------	------	------	------

S O W N U T D

$\begin{array}{r} 4.36 \\ - 3.12 \\ \hline \end{array}$	$\begin{array}{r} 0.75 \\ - 0.04 \\ \hline \end{array}$	$\begin{array}{r} 1.83 \\ - 1.73 \\ \hline \end{array}$	$\begin{array}{r} 5.24 \\ - 3.24 \\ \hline \end{array}$	$\begin{array}{r} 2.98 \\ - 1.25 \\ \hline \end{array}$	$\begin{array}{r} 3.05 \\ - 0.23 \\ \hline \end{array}$	$\begin{array}{r} 6.72 \\ - 5.39 \\ \hline \end{array}$
---	---	---	---	---	---	---

1.24	0.71	0.10	2.00	1.73	2.82	1.33
------	------	------	------	------	------	------

C I H R E K A

All suspects that do NOT have DARK hair should be crossed off the list.

Possible Suspects

	Male/Female	Wears Glasses?	Hair Color	Shirt Color	Shoe Size
Al Mondjoi	male	yes	light	red	big
Buster F. Inger	male	yes	dark	red	big
Candace Dulce	female	yes	dark	blue	small
Cara Mello	female	no	light	blue	small
Charles Tunshew	male	no	dark	green	big
Clark Barre	male	yes	dark	green	big
Emmy Nemms	female	no	dark	blue	small
Henry Oh	male	no	dark	blue	small
Lee Monhedd	male	no	light	red	big
Lynn D. Taah	female	yes	dark	green	small
Marcy Bahres	female	no	dark	green	small
Mary Jane Miller	female	yes	light	green	big
Mike Enike	male	yes	dark	blue	small
Patty Yorkshire	female	yes	light	red	big
Peach B. Losum	female	no	light	green	small
Roe Lowe	female	no	dark	blue	big
Starr Burrst	female	yes	light	red	small
Tim Tamme	male	no	light	red	big

Multiply Decimals - Clue 2

Another detective took statements from some witnesses, but only one is true. Complete the multiplication problems below and cross out each box that matches a correct answer. The only box left contains the correct statement!

3.12 "I someone with light colored hair acting suspicious."	3.72 "A man knocked into me as he ran out of the store with a large bag."	0.63 "I noticed a piece of red fabric torn on one of the shelves."	1.05 "I heard that there was a whole group of people that broke in."
23.94 "There was someone with glasses asking if there was a back door."	16.8 "There was a man with a dog who left without buying anything."	26 "There was a kid in a blue shirt who came back into the store 3 times."	4.39 "I think I saw a woman secretly putting some candy into her backpack."
22.32 "I don't remember anyone with glasses in the store. Does that help?"	21 "I didn't see anything suspicious. I'm sure it was just a mistake."	18.6 "There were some big footprints out on the sidewalk. But I don't know if they were from today."	3 "I think I saw some kids take off on bikes after the police were called."

$2 \times 8.4 = \underline{\mathbf{16.8}}$

$6.3 \times 3.8 = \underline{\mathbf{23.94}}$

$3.25 \times 8 = \underline{\mathbf{26}}$

$3.1 \times 6 = \underline{\mathbf{18.6}}$

$5 \times 0.6 = \underline{\mathbf{3}}$

$9 \times 0.07 = \underline{\mathbf{0.63}}$

$5.0 \times 4.2 = \underline{\mathbf{21}}$

$0.93 \times 4 = \underline{\mathbf{3.72}}$

$7.2 \times 3.1 = \underline{\mathbf{22.32}}$

$1.3 \times 2.4 = \underline{\mathbf{3.12}}$

$2.1 \times 0.5 = \underline{\mathbf{1.05}}$

All suspects that are NOT a WOMAN should be crossed off the list.

Possible Suspects

	Male/Female	Wears Glasses?	Hair Color	Shirt Color	Shoe Size
Al Mondjoi	male	yes	light	red	big
Buster F. Inger	male	yes	dark	red	big
Candace Dulce	female	yes	dark	blue	small
Cara Mello	female	no	light	blue	small
Charles Tunshew	male	no	dark	green	big
Clark Barre	male	yes	dark	green	big
Emmy Nemms	female	no	dark	blue	small
Henry Oh	male	no	dark	blue	small
Lee Monhedd	male	no	light	red	big
Lynn D. Taah	female	yes	dark	green	small
Marcy Bahres	female	no	dark	green	small
Mary Jane Miller	female	yes	light	green	big
Mike Enike	male	yes	dark	blue	small
Patty Yorkshire	female	yes	light	red	big
Peach B. Losum	female	no	light	green	small
Roe Lowe	female	no	dark	blue	big
Starr Burrst	female	yes	light	red	small
Tim Tamme	male	no	light	red	big

Divide Decimals - Clue 3

As you're investigating you find the third clue! Help figure it out by solving the division equations. Match your answers to put the letter in the box with the matching number (there may be more than one).

A

6

s	m	a	l	l
---	---	---	---	---

3

10.5

6

2.7

2.7

f	o	o	t	p	r	i	n	t
---	---	---	---	---	---	---	---	---

0.05

40

40

1.6

5

1.02

1.2

11

1.6

i	s
---	---

1.2

3

i	n
---	---

1.2

11

t	h	e
---	---	---

1.6

1.16

0.23

g	a	r	d	e	n
---	---	---	---	---	---

8

6

1.02

2

0.23

11

o	u	t	s	i	d	e
---	---	---	---	---	---	---

40

200

1.6

3

1.2

2

0.23

$$5 \div 2.5 = \underline{\mathbf{2}}_{\text{D}}$$

$$4.5 \div 1.5 = \underline{\mathbf{3}}_{\text{S}}$$

$$7.5 \div 1.25 = \underline{\mathbf{6}}_{\text{A}}$$

$$8 \div 0.2 = \underline{\mathbf{40}}_{\text{O}}$$

$$0.69 \div 3 = \underline{\mathbf{0.23}}_{\text{E}}$$

$$0.01 \div 0.2 = \underline{\mathbf{0.05}}_{\text{F}}$$

$$3.6 \div 3 = \underline{\mathbf{1.2}}_{\text{I}}$$

$$2.04 \div 2 = \underline{\mathbf{1.02}}_{\text{R}}$$

$$8 \div 5 = \underline{\mathbf{1.6}}_{\text{T}}$$

$$4.64 \div 4 = \underline{\mathbf{1.16}}_{\text{H}}$$

$$6 \div 0.03 = \underline{\mathbf{100}}_{\text{U}}$$

$$8.64 \div 3.2 = \underline{\mathbf{2.7}}_{\text{L}}$$

$$5.5 \div 0.5 = \underline{\mathbf{11}}_{\text{N}}$$

$$1.25 \div 0.25 = \underline{\mathbf{5}}_{\text{P}}$$

$$21 \div 2 = \underline{\mathbf{10.5}}_{\text{M}}$$

$$9.6 \div 1.2 = \underline{\mathbf{8}}_{\text{G}}$$

All suspects that do NOT have a SMALL footprint should be crossed off the list.

Possible Suspects

	Male/Female	Wears Glasses?	Hair Color	Shirt Color	Shoe Size
Al Mondjoi	male	yes	light	red	big
Buster F. Inger	male	yes	dark	red	big
Candace Dulce	female	yes	dark	blue	small
Cara Mello	female	no	light	blue	small
Charles Tunshew	male	no	dark	green	big
Clark Barre	male	yes	dark	green	big
Emmy Nemms	female	no	dark	blue	small
Henry Oh	male	no	dark	blue	small
Lee Monhedd	male	no	light	red	big
Lynn D. Taah	female	yes	dark	green	small
Marcy Bahres	female	no	dark	green	small
Mary Jane Miller	female	yes	light	green	big
Mike Enike	male	yes	dark	blue	small
Patty Yorkshire	female	yes	light	red	big
Peach B. Losum	female	no	light	green	small
Roe Lowe	female	no	dark	blue	big
Starr Burrst	female	yes	light	red	small
Tim Tamme	male	no	light	red	big

Comparing Decimals - Clue 4

You get a chance to review the security footage! In the grid below are a bunch of clues from the tape, but only one is correct. Cross off all the boxes that do not compare the numbers correctly. The one with the correct comparison has the correct clue.

 $1.5 < 1.05$ The suspect escaped out the back door with her skateboard. 	 $26.0 = 2.60$ There's a women in the second aisle with a huge backpack and small sandals. 	$6.09 < 6.90$ With a closer look, you can see that the suspect isn't wearing glasses.
 $0.97 > 3.25$ It's hard to see, but it looks like a woman in glasses with a blue shirt is the suspect. 	 $9.45 < 5.87$ There's a woman who entered the store 3 times but didn't buy anything. 	 $0.20 > 2$ In the chocolate aisle, someone with a big hat is emptying the shelves into her purse.
 $21.9 < 9.19$ The tape shows someone suspicious with a hat and huge sunglasses. 	 $15.0 = 150$ It's really hard to tell what the suspect is wearing. 	 $46.10 > 46.1$ A woman in jeans and a red shirt can be seen sneaking candy into her pockets.
 $0.80 < 0.08$ The suspect clearly has a large purse and is wearing high heels. 	 $45.0 > 321$ There's a man with a striped shirt passing candy to a woman in a blue shirt. 	 $16.3 > 50.3$ The suspect's shirt is either red or green.

All suspects who wear GLASSES should be crossed off the list.

Possible Suspects

	Male/Female	Wears Glasses?	Hair Color	Shirt Color	Shoe Size
Al Mondjoi	male	yes	light	red	big
Buster F. Inger	male	yes	dark	red	big
Candace Dulce	female	yes	dark	blue	small
Cara Mello	female	no	light	blue	small
Charles Tunshew	male	no	dark	green	big
Clark Barre	male	yes	dark	green	big
Emmy Nemms	female	no	dark	blue	small
Henry Oh	male	no	dark	blue	small
Lee Monhedd	male	no	light	red	big
Lynn D. Taah	female	yes	dark	green	small
Marcy Bahres	female	no	dark	green	small
Mary Jane Miller	female	yes	light	green	big
Mike Enike	male	yes	dark	blue	small
Patty Yorkshire	female	yes	light	red	big
Peach B. Losum	female	no	light	green	small
Roe Lowe	female	no	dark	blue	big
Starr Burrst	female	yes	light	red	small
Tim Tamme	male	no	light	red	big

Write Decimals - Clue 5

It seems like you almost have the culprit but there's just one more clue you need...and there it is! The suspect's shirt looks like it got caught in the door and a piece tore off. Find the number that matches the written out decimal below to find out the color of the shirt.

five hundred twelve and seven tenths

52.17
yellow

51.27
blue

512.07
green

5,127.0
green

52.7
green

521.7
red

52.70
purple

512.17
blue

512.70
blue

52.07
green

512.71
blue

521.07
blue

521.70
green

521.70
green

All suspects who were NOT wearing a BLUE shirt should be crossed off the list.

Possible Suspects

	Male/Female	Wears Glasses?	Hair Color	Shirt Color	Shoe Size
Al Mondjoi	male	yes	light	red	big
Buster F. Inger	male	yes	dark	red	big
Candace Dulce	female	yes	dark	blue	small
Cara Mello	female	no	light	blue	small
Charles Tunshew	male	no	dark	green	big
Clark Barre	male	yes	dark	green	big
Emmy Nemms	female	no	dark	blue	small
Henry Oh	male	no	dark	blue	small
Lee Monhedd	male	no	light	red	big
Lynn D. Taah	female	yes	dark	green	small
Marcy Bahres	female	no	dark	green	small
Mary Jane Miller	female	yes	light	green	big
Mike Enike	male	yes	dark	blue	small
Patty Yorkshire	female	yes	light	red	big
Peach B. Losum	female	no	light	green	small
Roe Lowe	female	no	dark	blue	big
Starr Burrst	female	yes	light	red	small
Tim Tamme	male	no	light	red	big

Solution

	Male/Female	Wears Glasses?	Hair Color	Shirt Color	Shoe Size
Al Mondjoi	male	yes	light	red	big
Buster F. Inger	male	yes	dark	red	big
Candace Dulce	female	yes	dark	blue	small
Cara Mello	female	no	light	blue	small
Charles Tunshew	male	no	dark	green	big
Clark Barre	male	yes	dark	green	big
Emmy Nemms	female	no	dark	blue	small
Henry Oh	male	no	dark	blue	small
Lee Monhedd	male	no	light	red	big
Lynn D. Taah	female	yes	dark	green	small
Marcy Bahres	female	no	dark	green	small
Mary Jane Miller	female	yes	light	green	big
Mike Enike	male	yes	dark	blue	small
Patty Yorkshire	female	yes	light	red	big
Peach B. Losum	female	no	light	green	small
Roe Lowe	female	no	dark	blue	big
Starr Burrst	female	yes	light	red	small
Tim Tamme	male	no	light	red	big

CERTIFICATE OF ACHIEVEMENT

AWARDED TO

For solving the

Candy Caper

Mage Math

Mage Math



CERTIFICATE OF ACHIEVEMENT

AWARDED TO

For solving the

Candy Caper

Mage Math

Mage Math



Looking for MORE?

Check out these other great
math resources on

Mage Math